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ABSTRACT

The report presents an evaluation of the internal operation and potential application of Project RFD, a multi-media demonstration project in Adult Basic Education for rural adults. The first section of the report contains a description of the project, and a summary and rating of the attainment of each of the 10 project goals. Subsequent sections evaluate the conceptualization, development, and operation of the project components: the television component, the home study materials component, the home visit component, and other components such as radio, almanac, and action line. The final section is a cost analysis of the project. Eleven recommendations, mostly of a general nature, are included. (JR)

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REPORT OF EXTERNAL EVALUATION TEAM

Human Factors Research Laboratory
Colorado State University
Fort Collins, Colorado
July 1972

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REPORT OF

EXTERNAL EVALUATION TEAM

FOR PROJECT RFD

Human Factors Research Laboratory
Colorado State University
Fort Collins, Colorado
July 1972

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General Summary

Introduction

Project RFD is a demonstration project in Adult Basic Education funded under the provisions of Section 309(b) of the Adult Education Act of 1966. The project has operated during the 1970, 1971, and 1972 fiscal years with a total funding of $708,000. The project has operated at the University of Wisconsin - Extension which is in Madison, Wisconsin.

The external evaluation was conducted by a team of five persons from Colorado State University, Fort Collins, Colorado. The evaluation work was funded by project monies with a sub-contract written between Colorado State University and the University of Wisconsin. The contract was made on the basis of a proposal submitted by the team to a Request for Proposal for evaluation issued by Project RFD. This report presents the findings and judgments of the team.

The following persons were the team members: all from Colorado State University.

Mr. Preston Davis, Director, Office of Educational Media
Dr. Mary Helen Haas, Professor of Vocational Education
Dr. Ronald Wykstra, Professor of Economics
Dr. Henry Cross, Professor of Psychology and co-director of the evaluation study.
Dr. Douglas Sjogren, Professor of Education and co-director of the evaluation study.

A considerable amount of description of the project is included in this report. It is recommended, though, that the person who wants in-depth descriptive information obtain copies of the reports listed in the reference list at the end of this report.

Purpose and Method of the Evaluation Study

Our perception of the purpose of the External Evaluation study was that of validation. The primary concern seemed to be one of having an independent group of knowledgeable persons observe, study, and make judgments about the project with respect to its internal operation and its potential application. Such judgments have been made by the Project RFD staff on the basis of information gathered in a quite comprehensive internal evaluation effort. The question for the external evaluation then is whether an independent group will arrive at the same judgments using essentially the same information base.

The overall purpose of the external evaluation is reflected in the six purposes stated in the call for sealed bids issued by the project. The purposes, listed below, served as the objectives of the external evaluation study.

1. To review the accomplishments of the project in design, field testing, and evaluation.
2. To assess the extent to which the project achieved its objectives.
3. To assess the extent to which data collection has been adequate to the requirements of the research.
4. To assess and make judgments about the design and execution of the internal research.
5. To relate cost to accomplishments.
6. To prepare a report that will be readily incorporated into the final project report.

The team operated much like an accrediting team. Much of the information for the evaluation study was in the form of reports issued by the Project RFD staff. They have done a good job of preparing descriptive narrative reports of the project as it has proceeded. The narrative not only describes what occurred, but also includes the rationale for the decisions that were made.

The Psychometric Laboratory at the University of Wisconsin did the internal evaluation for the project. The lab has produced several reports on various aspects of the project. These reports were available to the team, and provided valuable information for the external evaluation.

Members of the team visited the project and interviewed many people who were associated with the project. A total of 10 man-days were spent on the site by the team and about 50 persons were interviewed. Those interviewed included project staff, former staff, participants, ABE personnel, advisory committee members, and several persons in the University hierarchy. The information obtained in the interviews was an important supplement to that available in the reports.

During the time of the study, the team met several times to review the information that had been obtained, and to decide on information needs. These meetings permitted the team members to check their impressions against the others, and to stimulate the thinking of the team. Generally, the team meetings occurred before and after a member or members visited the project.

From a methodological point-of-view we felt that having all the evaluation team members from one institution facilitated the study. We were able to interact quite often over a period of time. This seemed to help us to clarify our thinking and check our perceptions of the project.

This report then is of our judgments of the project. The first section of the report contains a brief description of the project and a summary statement on the attainment of the project goals. The subsequent sections are essentially critiques of the conceptualization, development and operation of each of the components of the project. The final section is a cost analysis of the project.

Overview

Project RFD was conceived as a method or model for delivering educational opportunity to the rural adult. More specifically the project proposed to deliver educational opportunity to the rural adult who is undereducated, i.e. Adult Basic Education. Essentially the project was a demonstration and test of two related ideas. First, it was a demonstration and test of a delivery system that might have many kinds of application. Second, it was a demonstration and test of materials designed to provide educative experiences for undereducated adults.

The needs for the delivery system and for the educative experiences were quite well documented in the first proposal. Furthermore, the rationale for the model and for the experiences seemed to be sound. The proposed demonstration and test was well-conceptualized and seemed to have a reasonable probability of success even though it should be considered a high-risk type of project. The models are detailed in references one and two.

The fidelity of the project as it was conducted with its conceptualization was fair. Several changes were made in both of the basic ideas from conceptualization to operation. The basic ideas, however, did persist and the project as conceptualized was certainly recognizable in the operation.

The critiques of each component present specific detail on the changes from conceptualization to operation. A summary of the changes is presented here for those readers who only want an overview.

Quoting from the first-year proposal the original goal of the project was:

> "Development of a...rural adult basic education and continuing education demonstration and research project utilizing educational television, individualized home study instruction techniques, and a personalized home contact instruction and evaluation plan....
>
> ...By combining these three elements, the University and State of Wisconsin propose to demonstrate a new approach to providing adult basic education courses for the rural disadvantaged."

The television component was regarded as the "basic instructional and motivational tool". The half-hour programs were to be designed "to introduce educational concepts of importance to the entire student group and to motivate the student prior to the programmed, variable-speed, home study phase of the instruction."

The home study component was intended to consist of materials that would be used by the student in his home setting much in the nature of correspondence courses. They were to be designed so that the student could proceed at his own pace. Several areas of study were intended including basic literacy, family life and consumer education, social relations, conservation, enjoyment of life, and others. The materials were to be for those with elementary level reading skills.

The home-contact component was intended as a procedure for instructing, motivating and counseling, and for evaluation of the student's progress. The "Home Study Aide" was to provide direct instruction.

In the ideal sense, the intent was that a student would view a TV program that would provide some basic instruction and stimulate interest. Then the student would receive the home-study materials that were appropriate. The home visitor would interact with the student weekly and answer questions, instruct, counsel, and provide incentive for persisting in the program.

The first year of the project was devoted to the development of the materials and procedures for operationalizing the demonstration. Several decisions were made during the first year that resulted in changes in the conceptual design. The three main components; television, home-study, and home visit were still included and some new components were added; an action line, a newspaper or almanac, and a radio show.

The intent for the television component changed somewhat. Surveys were conducted on viewing likes and dislikes. On the basis of the surveys and careful consideration of the potential of television, it was decided that the TV component would be designed to serve primarily in a motivational function. A "magazine show" format was developed for the twenty half-hour programs that were used in the demonstration. The shows contained interviews with personalities, helpful hints on buying, cooking, home repair, etc., and short spots on topics like conservation, insurance, social security, etc.

The home study component changed considerably during the first year. On the basis of surveys and consultation two major decisions were made. First, the emphasis changed. Whereas literacy skills were emphasized in the original proposal, the intent of the home study materials after the first year of work had changed to a broader concept of literacy. The primary emphasis shifted to materials on what were called coping skills.

Coping skills were defined as the skills and knowledge needed to interact effectively in one's environment. It was decided that materials would be made available in five general areas called content centers. The content center topic areas were entitled, "About Me", "About Me and Others", "About Me and My Money", "About My Work", and "Me and My Community. Materials on the usual literacy skills, the three R's, were to be available still, but only on specific request or on a decision made by the student with the home visitor.

The second major decision was with respect to assumptions about the reading level of the coping skills materials. The original plan was to develop materials for reading levels 0-8. Actually, it was intended that the materials be written at three levels roughly equivalent to K-2, 3-5, and 6-8. On consultation, it was decided to prepare only one set of reading materials with a reading equivalency of about grade 5. This decision was probably a good one from the practical viewpoint in that it reduced the amount of materials that had to be produced. On the other hand, the decision did compromise the original Adult Basic Education objective somewhat.

The conceptualization of the home visit component also changed during the first year planning period. The intent that the home visitor would be a motivator, counselor, and friend was maintained but the instructional function of the home visitor was de-emphasized. One fact about the home visit component became obvious during the planning year. This was that there was a very real limit on the number of home visits that could be made. It was decided that the home visit component would be used with 50 persons in the demonstration.

With respect to the action line, almanac, and radio show, it is not clear from the reports just when these were conceptualized. The action line component is described in the second year report and is rationalized as a feedback linkage between the participant and the program. The learner audience had a direct communicative link with RFD and the members were provided a means for solution of personal problems.

The purpose of the almanac is not clearly enunciated in any report. It appears to have been designed as a motivational device in that it is a procedure for regular contact with the audience. The specific need for which it was designed is not clear to us, however.

The radio program is not described either. Apparently its purpose was to do some of the same things as the TV programs in homes where there was no TV. We feel this medium might have been used more than it was.

The second year of the project was the development and demonstration year. The twenty TV tapes were produced, the home study materials were selected and/or written, the home visitors were hired and trained, the evaluation procedures were developed, and the sample for the demonstration study was selected. All was supposedly in readiness for the demonstration study by January 1. There was some slippage, however, and although the demonstration study started on schedule, it was hampered by the fact that all was not ready.

Actually there were two demonstration studies. One study was an experiment in which two random samples with an N of 50 in each were drawn from a population of an identified target audience in the four counties served by WHA-TV. One sample, hereafter called the treatment group, had access to all components. The received the TV programs, received the home study materials, had home visitation, and had access to the action line, almanac, and radio program. The other sample, the control group had access to every component except the home visitation. The sampling procedures were such that this study appeared to be a well-controlled experiment in which the independent variable categories were having or not having home visitation. The critique of the design section of this report indicates some of the problems that were encountered in this study.

The second demonstration study was done with the rest of the population in the WHA-TV viewing area. The entire population had access to every component but the home visitation. Extent of participation was studied. This study is also critiqued in the design section of this report.

The third year of the project has been devoted to analyzing and reporting the evaluative information, revising and writing materials for national dissemination, conducting dissemination activities, and planning next steps.

Was Project RFD successful? It has been said in many ways that there are many sides to truth. So it is with RFD. It was not a failure nor was it the success some might have hoped. Some things were done very well, some things were not done at all as expected. A model was implemented and educational experiences were delivered, but the model is not, nor should it be expected to be, the final solution to adult education.

A reading of the critique sections will reveal the specific reasons for our middle-of-the-road conclusions. As a conclusion to this summary statement, however, we have reviewed each of the original objectives of the project and offered our judgment of the extent to which the objective was attained.

Objective One - Demonstrate the effectiveness of an integrated television, home study, home contact and visit program for rural ABE students.

This objective was really the overall goal of the project. This objective was attained to some extent in that the project did develop and carry through a method for delivering educational activities to adults. Furthermore, the delivery system did include all the components.

Three key words in this objective are "effectiveness", "integrated" and "rural". An attempt was made to integrate the components, but the integration was not effected well in the demonstration. There was little evidence that the TV programs were designed to stimulate interest in materials in the content center. The home visitors and the participants with whom we visited saw little or no correlation among the three components except for the home visitor helping the participant obtain materials. The TV programs did include spots where materials in the content center were mentioned and information was provided on how to obtain the materials. New materials were described each week, however, and it is unlikely that the participant in the target audience would be ready for new material on a weekly basis. Also any single TV program did not reveal all of the materials that were available so the participant was not really aware of all of the alternatives. Of course, those participants who had the home visitor were likely made aware of the alternatives by the home visitors. The TV programs were very much designed with a "soft-sell" approach, perhaps too soft.

The project did many things to stimulate contact between the potential participant and the project, and these activities did serve an integrative function. The action line, post card contacts, and the extensive publicity in the project did serve to increase awareness of the many things that Project RFD had to offer.

Our judgment with respect to the integration attempt is that the project staff made a concerted effort to achieve integration of the components, but were not as successful with this intent as might have been desired. They did learn much about the problem of integrating multi-media approaches.

The second key word is effectiveness. This word implies some criteria which are not specified in this objective. The criteria are suggested, however, by some of the other objectives, and the discussion of those objectives suggests the extent of effectiveness of the project. In summary, the project did have a high level of participation in the four county area. There is some question, however, whether the participation rate was high in the target audience. Many people requested materials. The requests for materials were significantly higher in the group that had the home visitor than in the control group or the rest of the population. The home visit

component apparently was effective in getting educational materials into the hands of the participant. There was little evidence, however, that there was any change in skill, knowledge, or attitude due to the project or any of its components.

The last key word is rural. The project was originally designed for a rural audience. This intent was not maintained, however, and the project was really for the total population. In fact, it appeared that in terms of absolute numbers and also proportionately, the participants generally were from the metropolitan area of Madison. Furthermore, the 100 subjects in the experiment were primarily from towns in the area rather than from farms. This does not indicate that the delivery system and materials would be ineffective with a rural audience. We still don't know.

On a 5 point scale of attainment, with 5 indicating a high degree of attainment, we rate the attainment of this objective at 3.0 to 3.5.

Objective Two - Demonstrate the effectiveness of the role of mass media in rural ABE programs.

This objective is not clear to us, again because of the terms "effectiveness", "role", and "rural". We have addressed the problems with the terms effectiveness and rural in the discussion of the first objective. The term "role" is problematic because there is no definition of just what the role is conceived to be.

If the role of mass media is to stimulate and motivate, then there is some evidence that this occurred. Many people watched the programs. A large majority of those who watched liked the programs. Many of the watchers were stimulated to contact the project for materials. These observations do indicate that assigning a stimulation role to mass media is effective.

With the definition of the role used here and disregarding the rural audience intent, we rate the attainment of this objective at 3.5 to 4.0.

Objective Three - Create a viable television-based multi-media program usable in similar situations in other parts of the county.

The project did create and demonstrate a television-based multi-media program. They have also developed a plan for use of the model in other areas along with cost estimates. The rationality or feasibility of the model is attested to by the fact that several states and other agencies have indicated an interest in using all or parts of the model. The project staff certainly believes the model is viable. They have developed a proposal to implement the model in a career

education program. Many persons whom we interviewed in the University and who were not directly associated with the project, indicated a feeling that the model seemed to have promise as a method for the outreach function of the University.

The viability of the program in other situations is very much related to costs. The cost of the television and materials components would be reasonable if they are used by a large number of people over a period of time. The cost analysis of the project showed the fixed costs of these two components to be quite high but if the costs are amortized over a number of people and over time they are relatively low per unit. The same is true of the almanac and the radio show. The fixed costs for the home visit component are quite high as are the variable costs. This component is expensive and its cost increases proportionately to time and persons served. The action line component was relatively inexpensive in the project because of volunteer help. If the labor costs for action line were to have been real it likely would have been quite costly.

The generalizability of the materials is another issue with this objective. The TV programs produced for RFD are not generalizable. They contain specific references to events and places in Wisconsin. On the other hand, there are parts of each tape that might be used in other situations. The staff of the project has studied the issue of generalizability. Their position now seems to be that spots or short sequences might be developed for general distribution, but that the total program should be put together so that it uses local talent and references. It should be evident that the generalizability issue is related to costs. It also may be related to effects. A general tape would be usable in many situations and over a period of time so that its cost could be amortized to a relatively low cost per unit. Specific tapes would have to be done over so that production costs would increase as well as unit amortization costs. On the other hand, specific tapes might be more effective than general tapes in attracting and holding audiences. There is likely an optimum balance but what that point might be is not known.

The home study materials seem to be generalizable to many situations. They do not contain specific references, and the topics are quite general. A publishing house has contracted to publish much of the material for generalizability of the home study materials.

Our attainment rating of objective three is 3.5 to 4.0.

Objective Four - Demonstrate the effectiveness of an interdisciplinary family and community oriented approach to rural ABE programs.

The effectiveness issue rears its ubiquitous head again. The materials were interdisciplinary in that they were on topics that were quite general and involved principles from several bodies of knowledge.

The materials were also family and community oriented in that they dealt with concerns of everyday life: work, the family, the home, money, etc. The project did demonstrate effectiveness in this area in the sense that materials could be developed with the family and community orientation. Furthermore, the materials seem to be rational, accurate, informative, and interesting. Unfortunately there is little evidence on their effectiveness with respect to participant behavior.

Our attainment rating for this objective is 3.0 to 3.5.

Objective Five - Involve large numbers of undereducated adults not now able or willing to participate in ABE programs.

It is difficult to determine just how many undereducated adults did participate in the program. From one point-of-view it could be argued that every adult who contacted RFD was undereducated in some degree. They had a need or want for information and initiated action to obtain it. Some 3,000 adults did contact RFD for something during the five month demonstration. This is a large number.

Undereducated usually connotes a person with little education, however. Excluding the 100 persons in the experiment, the available figures suggest that about 15% of the contractors were individuals with less than an eighth grade education. This 15% figure is very near to the percent of persons with less than an eighth grade education in the four county area. The program did not attract a disproportionately large number with little education, but it also did not have a disproportionately small representation from this educational category. The typical situation is that educational programs will attract persons with education and those with little education are notable in their nonparticipation. Project RFD seems to have broken this pattern somewhat. We would predict that if the demonstration had operated for longer than five months, the participation rates of the typical undereducated adults would have increased.

The experimental study had some interesting results in terms of involvement. The 50 persons in the treatment group persisted well in the project. There were 12 drop-outs but 8 of these were in the last month. The reasons for drop-outs were generally like moving, working full-time, or family problems. There were two refusals. The treatment group had a high rate of participation in terms of viewing the programs and using the materials. Those in the control group had a higher rate of participation than the general population but not as high as the treatment group. Two conclusions are suggested:

1. The special attention given the control group during the recruitment phase seemed to stimulate them to participate even though

they did not have the home contact. This result suggests that some form of a stated commitment is conducive to participation and persistence. For example, enrollment procedures are a form of a commitment that might have a beneficial effect.

2. The home contact component was effective in stimulating involvement and participation. Exposure to education is an important first condition. In the five month demonstration, the home contact component had a positive impact on exposure. Furthermore, the efforts expended in publicity and advertising by the project seemed to have a pay-off in terms of involvement.

We feel this objective was well-attained and our rating is 4.0 to 4.5.

Objective Six - Develop a program that will improve ABE instruction while maintaining the lowest possible cost-per-pupil.

We feel this was an unrealistic objective, especially the aspect of "lowest possible cost-per-pupil". A demonstration project will usually not operate as efficiently as it could. Thus, the cost-per-pupil was quite high. Some comparisons are available. A home-based ABE program that provided four hours of instruction per week for four months to about 100 students had a cost per student of about $185. A rough allocation of project costs indicated that the cost-per-student for the treatment group was about $2,400. It must be recognized of course, that there were some 2,900 other persons who received some benefit and their cost was about $200 per student. Furthermore, these costs would be reduced considerably as the program was re-run. Even so the cost-per-pupil was high as would be expected.

There is no real evidence that the program improved ABE instruction. Materials were developed that appear to be useful and they were used. Whether they were an improvement is not known.

An objective like this one is nice to have, but, as stated, is quite unrealistic. We have to rate the attainment of the objective low, and the rating is 1.0 to 1.5.

Objective Seven - Assist in the development of skills that can lead to new careers for home-study aides and other staff members.

In contrast to Objective Six, this objective was realistic. The project was not committed to development of new careers. Rather the very realistic intent was that the staff would learn things that might lead to new careers.

Although all of the staff members were considered in the objective, it is probably correct to assume that the objective pertained

primarily to the home study aides (home visitors). The home visitors did receive a considerable amount of training prior to and during the demonstration. Some dissatisfaction with the training was expressed by the home visitors. They felt they should have been able to function more as a teacher than they did. The teaching role was not regarded as the proper role by the project, however. Consequently, the training was oriented to the home visitor being able to establish a helping relationship with the student, and to knowledge of resources that were available for the student. The home visitors did indicate that they were well-trained in these areas.

It is important to note that at the end of the project two of the home visitors were hired in one of the counties to do those things they had done in the project for an Area Vocational-Technical school. Thus, even though there was no job description in any agency for a person with home visitor skills, in one county they did regard this function to be important enough to find a way to create such a job.

We rate the attainment of this objective 3.5 to 4.0. The rating might have been higher, but we judged that there were some problems with the training such that the role definition for the home visitor was not as clear as it might have been.

Objective Eight - Demonstrate involvement of disadvantaged individuals in the development and implementation of such a program.

The project did solicit and receive input from disadvantaged adults in the planning and development stages. The inputs were in the form of interest surveys, TV viewing interest surveys, and reactions to materials. These efforts were important in that they did provide good information as a basis for some of the important decisions.

The word "involvement" implies more to us, however, than being an information giver. The word connotes things like commitment, interaction, and participation in decisions. We don't feel this kind of involvement was evident. The project exhibited a fault we feel is present in too many of our educational programs. Typically we do a needs assessment (formally or informally) and then we interpret the results and decide on a program that will do something to or for somebody else. That somebody else is not involved in the interpretation and decision making. As a consequence the program is perceived by the participant as "their program" rather than "ours". We criticize RFD in this sense. Disadvantaged individuals were not represented on the advisory committee. Some did sit on a field advisory board but this board did not seem to have functioned very well.

None sat-in on any of the decision making sessions. Of the participants with whom we visited the tone was, "It was nice that the University (or government) did this for us", rather than one of really identifying with the project as "ours".

The almanac and the various feedback procedures were probably attempts to obtain identification with the project by participants. They may have had some effect in this way. Our impressions based on conversations and the obvious resistance to being interviewed by many at the end of the project, however, were that the target audience did not have a perception of being involved in the project except as a recipient of favors.

Our rating of attainment of this objective is 3.0 to 3.5.

Objective Nine - Develop participant skills in the basic fields of communication and computation while improving the capability of the target audience to exercise citizenship responsibilities.

This objective is the critical one for many of the people who will judge the RFD project. The project was funded as a demonstration in Adult Basic Education. Therefore, it should give evidence that it delivered Adult Basic Education. Unfortunately there is no strong evidence that the project met this objective very well. In the critique of the design, we have indicated some of the reasons perceived by us for the project not attaining this objective. These reasons are summarized here.

1. This objective changed after the project started. Whereas the emphasis at first was on communication and computation skills, it changed to an emphasis on coping skills. If one equates "citizenship responsibilities" with coping skills, then the objective as it actually was can be reworded as follows:

   "Develop skills of the target audience in coping with their environment while providing the opportunity to improve in the basic fields of communication and computation."

   In our judgment, even this objective stresses the communication and computation areas more than they were actually stressed in the demonstration. The project reports state that study materials were available in the literacy areas, but they were not pushed, and there is little evidence that such materials were requested or used. The TV programs generally mentioned only the coping skill materials, and the order form for materials included nothing in terms of literacy. The last few TV programs did make some mention of the possible availability of some literacy materials. In fairness to the project,

it should be noted that one reason these materials were not mentioned was because of a concern that a large number of parents would order them for their children.

One of the main criticisms of the project that we heard in our interviews was that the project erred when it de-emphasized the literacy training as much as it did. The point made was that while the coping skills are important, the basic three R's are also important, and that the project should have persisted with the original objective in this area. We feel this criticism has some merit.

2. The design used in the evaluation was not especially appropriate to the objective. Actually, the main evidence of relevance to this objective is from the controlled experiment. On four general criterion measure areas (three of which were content-oriented) there were no significant differences at the .05 level between the treatment and control group means. Recall that the treatment difference was having or not having a home visitor. There is less evidence on whether receiving and using the materials and viewing the TV program had an effect. The only evidence is that the treatment group received significantly more materials than the control group, but still did not score higher on the criterion measures.

3. The demonstration as designed did not optimize the results. We feel the readiness of the participants in the experiment for an educational experience was over-estimated. It seemed that the demonstration was nearly half-over before the home visitor had gained enough rapport with many of the participants to be able to work with them on educational activities.

4. The measuring instruments were based on a large number of behavioral objectives that were listed during the first year. When the emphasis changed, many of the stated behavioral objectives were no longer relevant to the content of the materials. It should be noted that the difference between the means of the treatment and control group was significant at less than the .10 level (one-tail) in favor of the treatment group on the one measure that was most relevant to the content materials.

5. Several errors were made in the operation of the demonstration. More than a few of the participants did not have workable TV sets for much of the time and others were on the fringe of the viewing area where reception was bad. The content materials were not all prepared or the supply printed was not adequate so that some of the participants in the experiment did not receive some of the materials or experienced a long delay in receiving ordered materials.

There were positive outcomes with respect to this objective. The response to the TV programs and the content materials was very favorable, and there was a generally expressed feeling that they were informative. The demand for the content materials was high. In fact, this demand caused part of the problem mentioned in point five above. The project supply of some of the materials was exhausted before it was realized that there was not a supply available for tne experiment participants. Finally, the project did succeed in getting educational materials into the homes. Furthermore, the degree of success was related to the degree of treatment. That is, those with home visitors ordered the most materials, those without home visitors but who were specifically recruited (control group) ranked second, and the rest of the population ranked third. Exposure to education is the first element in education, and the project was successful in exposing people to educational activities.

Our rating of attainment on this objective is 2.0 to 2.5. We do feel that if the demonstration had run for another 13 weeks this objective might well have had a higher attainment level because the participants were just getting into educational experiences when the project ended.

Objective Ten - Develop participant skills from present proficiency toward eighth grade and twelfth grade equivalency achievement levels.

There is little evidence that this objective was attained. In fact, after the planning year decisions were made this objective was essentially dropped. No clear effort was made in the demonstration to achieve this objective.

Our rating of attainment on Objective Ten is 1.0 to 1.5.

Summary Statement

Project RFD was an ambitious effort in all of its phases; conceptualization, development, and demonstration. It was also a pioneering effort. Its objectives were also ambitious, and in our judgment the results were what would be expected of a first effort at an ambitious undertaking. Many things were done well, much was learned, and benefits did accrue to participants. On the other hand mistakes were made, there were errors in judgment, and the benefits were not as great as the promises. Our ratings of attainment of the objectives were such that we could give the project a global rating of 2.8 to 3.2 on a five point scale. This rating certainly reflects our feeling that the project was not as successful as would have been desired, but it also was not a failure. The project might be considered a relatively high risk type because of its innovative nature. There was little past history to permit strong predictions of its success, and there was little expertise

available to give the experience needed to maximize the likelihood of success. A high risk project by definition has a high probability of failure. Using this line of thinking Project RFD, as a high risk project, should be considered quite successful in that it did not fail.

The project did demonstrate that a multi-media educational approach can be put together and delivered into the home. The project also demonstrated that the participation rate using such an approach is quite high. The project produced materials that were judged to be interesting, informative and generalizable.

The project staff and others who have been affiliated with the project have learned much in the past three years. We strongly urge that they be encouraged and supported in their further efforts to refine and revise the model. Television, radio, home study, home visitors, all of these media should be exploited to expand the educational opportunities of adults as well as children. The staff of Project RFD and others who were associated with the project have made fine progress in learning how to use these media effectively. It would be tragic if that experience and knowledge were not put to use in further work in this area.

The Television Component

Television was one of the three primary components of RFD. In the first proposal, the conceptualization of the TV component seemed to be one of instruction. That is, television was to be used as a medium of instruction. The concept changed during the planning year, however.

A field study was made during the planning year, and the results indicated that the target audience preferred news and public affairs type programming and a "magazine" format. Other studies had indicated that TV was effective as a medium for developing awareness and stimulating interest rather than in-depth instruction. The decision was made then to use a magazine show format that was designed to stimulate and inform. Each half-hour program contained an average of 25 program segments none of which were longer than four minutes. The segments included presentations by the show anchorman, film clips of topics of interest, interviews with stars and with local persons who had important information, helpful hints, cooking, and other topics. The second-year report contains a complete listing of each program.

Four pilot tapes were made in the first year. These were shown to persons like those in the target audience; Head Start parents, students in ABE classes and GED students. The reaction to the four tapes was favorable in terms of interest and their being informative.

Twenty black and white tapes were then produced for the demonstration. Each was one-half hour and each used the magazine format. During the demonstration, one tape was shown four times each week over WHA-TV, a UHF station at the University of Wisconsin. The air times were consistent each week and seemed to be appropriate for maximizing audience coverage.

An original goal of the project was to develop basic television materials that could be used in a variety of rural situations throughout the country. This purpose implies that the programs should not be specific to one locality. The programs that were produced, however, were quite specific. They contained names, dates, addresses, and phone numbers in the four-county area. Thus the programs could not be used outside of the area, nor could they be used again en toto in the four county area. The rationale for this decision to make the programs specific is not clearly defended in the project material. Obviously, it was an attempt to personalize the programs and thus stimulate interest.

This generality-specificity question is very important in terms of cost and possibly in terms of effects. If a program is general enough that it can be shown in a variety of locations or shown repeatedly

in the same location, obviously it will have a lower unit cost. On the other hand, it may lose in terms of effectiveness. For example, reruns of the same program in one locality would be problematic with respect to viewer interest. The approach that RFD seems to advocate is that some program segments can be produced for general distribution, but the program should be put together for a specific audience. This approach is probably realistic if an optimum balance of cost and effectiveness can be achieved. Obviously, there are many questions about TV programming that need to be studied. The decision of Project RFD on the generality-specificity issue reflected an intuitive answer to a series of questions that might well be studied empirically. We do not fault the project for the decision. The decision did, however, result in their not meeting one objective, that of producing TV materials with a high degree of generalizability.

The following are offered as specific points of criticism of the TV component.

1. The programs were viewed by a large proportion of the audience. Surveys indicated an estimate of 20% of the homes with a TV set on during the viewing times did view an RFD program during the week. Furthermore, the proportion of viewers who were target audience was consistent with the proportion in the general population throughout the demonstration.

   This outcome was achieved even though the programs were in black and white and were shown over a UHF station. The exclusive use of a UHF station might be questioned because there were sets that did not have the UHF adaptor, and there were parts of the four counties that had poor reception of the UHF station. The advantage of UHF was programming time and/or cost. If the commercial VHF stations had been used, the air time would either have been on public service time (poor times usually) or been purchased time (high cost).

2. The reaction to the programs was favorable by those who viewed the pilot films and those who viewed the program in the demonstration. The programs were generally well-done and technically sound. Some specific program points of critique are:

   a. The choice of a local well-known personality was favorably received. He handled the show well and also brought an audience.
   b. The topics were appropriate. There was some feeling that there were too many segments in the programs which may have been confusing for the target audience.

c. The star segments were not considered too necessary.
d. Some of the film clips technically were not well done, especially the star segments. Other film clips had probably been seen before in other programs and thus were not unique to these programs. This might have damaged the impression that the program was unique to the audience.
e. The production, graphics utilization, and writing was technically sound but not especially imaginative. This is probably related to the fact that the programs were produced in a relatively short period of time. Creativity and imagination need time.
f. The RFD logo and theme music came on very often during a program and might have caused viewers to think the program had ended.
g. The level of abstraction and vocabulary in some segments was quite high for the target audience.
h. The attempt to integrate the content of the TV programs with the other components was only partly successful. There were references in the program to the content materials, but one would have to view every program to know what was in the content center. Furthermore, it would be likely that one might soon forget the content center reference of an earlier program. The Almanac served some purpose of integration between the TV and content centers. The integration intent was only partly achieved. Perhaps strong integration requires that the TV programs be produced on a continuing basis with several references to materials in different contexts.
i. The TV productions seemed to have been dominated by persons trained in TV. The programming might have benefitted from more input from persons who were knowledgeable about education of undereducated adults.

3. The project did demonstrate that TV can be used in a multimedia approach, and that undereducated adults will participate in educative experiences with this model. The programs are not generalizable, but the model is.

Buying Small Appliances

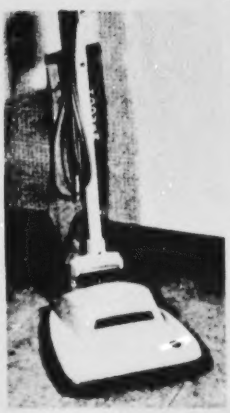
Do you know what to look for when buying small appliances?

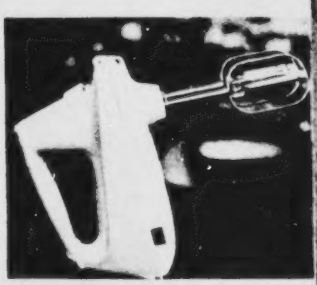
Many small appliances help a person do jobs easier and faster. Stop and think of some of the appliances you use for making your life more comfortable. You may think of these: toaster, clock, coffeemaker or iron. Now think of a small appliance you may not use often, such as an electric knife.

There are many small appliances you can buy. Most of them are fairly expensive. Don't buy small appliances you won't use often. Some appliances are used almost every day. Others may be used only a few times a year. Before you buy, decide how often you would use an appliance. Decide if it is worth the price to you. Small appliances often do things that major appliances do. For example, you may consider buying an electric frying pan. You probably do most of your cooking and baking on your stove. Because of this, you may decide an electric frying pan really isn't necessary for you.

KINDS OF SMALL APPLIANCES

There are two kinds of small appliances: those that give **heat** and those that give **power**. A mixer, electric fan or can opener give power. An iron, coffee maker and toaster give heat. Some of these appliances will do only one thing such as toasting bread or making coffee. Others will do several jobs. An example is the appliance which can open cans, crush ice, and sharpen knives. It is cheaper to buy one appliance that does several things. This is true, however, only if you need every service that an appliance will do. Otherwise, it is cheaper to buy the appliance that does the one thing you need.





The examples used in this bulletin are not meant as an endorsement of the product. They are used only to illustrate the points being made.

RFD WHA-EX-2-21 UNIVERSITY EXTENSION, The University of Wisconsin

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Home Study Materials Component (Content Centers)

The first year proposal gave an impression that the home study component of RFD would be basic literacy materials presented in a correspondence school kind of format. If this was the concept then it changed considerably during the planning and demonstration years. The changes were quite well justified and the home study concept that evolved in the project seems to be a sound approach.

Several things happened with respect to the home study component during the first year. One of the first decisions was that a sequential type curriculum was not appropriate for the target audience. Thus, the idea of having a person progress through traditional graded materials was rejected. Related to this decision was a second one that the materials should be immediately relevant to the needs, wants, and interests of the undereducated adults. The materials should be concerned with solving problems of the adult rather than teaching literacy skills per se. Of course, the expectation was that the study of relevant materials would also provide literacy skill training indirectly. It should be noted that the term "coping skills" was used to describe the aim of the content. A survey was made of a sample from the target audience. The results tended to substantiate the decision to orient the content to coping skills.

A model of the content component concept is in the first year report. According to this model, the primary content was directed at the coping skills. Materials on literacy skills, computation and communication skills, were available if the student identified a need for or interest in working in these areas.

A third decision made during the first year was to develop the materials for a reading level of grade four to six. Originally the intent was to develop materials so that the reading levels of 0 to 8 would be covered. This probably would have been done by writing the same content at three reading levels like 0-2, 3-5, and 6-8. The decision was certainly justified from the practical viewpoint, but it did somewhat compromise the Adult Basic Education intent of the project.

Another activity of the first year was developing behavioral objectives. A large number of such objectives were identified. We are confused about when this task was done or why it was not done over. A reading of the objectives in the first year report will reveal that a large proportion of them are stated in terms of improving literacy skills. Yet the emphasis of the content was on coping skills. The list of objectives was used by the internal evaluators for constructing the criterion instruments. We are concerned that the instruments were not as relevant to the project as they should have been because of their being based on an inappropriate set of behavioral objectives.

After the planning work was completed, the staff began work on developing the materials. The areas covered by the materials are presented in Figure 1. (The numbers are of the number of persons who received each unit.) The development task was large; 76 units. The intent was that the units would be put together using materials that were available, and the review of available materials was exhaustive. The review revealed that about 45 of the units required that all or part of the material would need to be written by RFD staff. A bigger task than was anticipated, and one which created problems.

A writing staff was employed during the first and second years. Some units were produced during the first year and field tested with a sample of Head Start parents and ABE students. The reaction to the materials in the field test was favorable. Some problems were encountered with the work of the writing staff. Some with whom we talked felt that they did not receive enough direction and wasted some time. This lack of direction probably occurred because of the unanticipated magnitude of the task and because the work was of a relatively innovative nature so that the project was feeling its way.

Most of the units were assembled in time for the demonstration. Ten were not done, however. Before discussing the demonstration, however, we will present some judgments about the content center materials.

The project staff indicated that they used three general criteria for selecting or developing materials. The criteria were Understandability, Believability, and Usability. We have judged the materials on these three criteria and the sub-criteria under each. The following table shows our judgments.

	Excellent	Good	Fair	Poor
A. Understandability		X		
Clarity	X			
Simplicity		X		
Specificity	X			
Readability		X		
B. Believability	X			
Identity	X			
Intentionality and Honesty	X			
Objectivity		X		
Reality	X			
C. Usability	X			
Practicability	X			
Applicability	X			
Transferrability		X		

Figure 1

EXHIBIT 0

RFD

CONTENT CENTER LISTINGS

I CONTENT CENTER: ABOUT ME

	Module A:	UNDERSTANDING MYSELF
100	Unit 1:	Who Am I Accepting a View of Myself
95	Unit 2:	Who Am I A Positive View of Myself
92	Unit 3:	What Affects Me Heredity and Environment
96	Unit 4:	What I Believe Developing Character
	Module B:	MY WELL BEING
70	Unit 1:	My Physical Health
72	Unit 2:	My Mental Health
65	Unit 3:	My Education
60	Unit 4:	My Leisure and Recreation
90	Unit 5:	Maturing and Growing Old Gracefully
	Module C:	BECOMING A BETTER PERSON
77	Unit 1:	I Am Changing How Change Affects Me
35	Unit 2:	I Am a Person Dignity, Integrity
49	Unit 3:	Motivation Self-Direction
69	Unit 4:	I Can Make Things Change

II CONTENT CENTER: ABOUT ME AND OTHERS

	Module A:	MY FAMILY
72	Unit 1	Home is for Family Living
112	Unit 2	Getting Along with One's Marriage Partner
104	Unit 3	Understanding Feelings of Family Members
139	Unit 4	Guiding Children and Building Character
91	Unit 5	Family Good Times
	Module B:	COMMUNICATING WITH OTHERS
59	Unit 1	My Friends
44	Unit 2	My Neighbors
82	Unit 3	The Art of Listening
66	Unit 4:	Respecting Other People's Ideas and Beliefs
	Module C:	WORKING WITH OTHER PEOPLE
	Unit 1	People I Deal with for Services
	Unit 2:	People I Work with on the Job
	Unit 3	People I Work for

III CONTENT CENTER: ABOUT ME AND MY MONEY

PART I: ABOUT MY HOME

	Module A:	MANAGING MY FAMILY'S MONEY
88	Unit 1:	My Income
113	Unit 2:	Family Spending Plan
90	Unit 3:	Using My Credit Wisely
105	Unit 4:	Family Security Plan
	Module B:	THE JOY OF GOOD FOOD
710	Unit 1:	A Choice Casserole or Stew
664	Unit 2:	Supper on the Table on Time
700	Unit 3:	Meals for a Day
696	Unit 4:	Wise Planning + Smart Shopping = Good Meals
	Module C:	BUYING GUIDES
213	Unit 1:	How to Buy Wisely
316	Unit 2:	Smart Food Shopping
190	Unit 3:	How to Buy Clothing
202	Unit 4:	Buying Home Furnishings and Appliances
186	Unit 5:	Satisfaction Guaranteed
	Module D:	HEALTH, SAFETY AND SANITATION
349	Unit 1:	Emergency First Aid
349	Unit 2:	Home First Aid
349	Unit 3:	Home Safety Plan
349	Unit 4:	Knowing Signs of Illness
349	Unit 5:	Home Sanitation
	Module E:	MAKING A HOUSE A HOME
94	Unit 1:	A Man's Home is His Castle
117	Unit 2:	Taking Care of the Inside
170	Unit 3:	Taking Care of the Outside
118	Unit 4:	How to Do-It-Yourself Repairs

PART II: ABOUT MY WORK

	Module A:	HOW TO LOOK FOR A JOB
93	Unit 1:	Sources of Jobs
93	Unit 2:	Letters and Forms
93	Unit 3:	Personal Interview
93	Unit 4:	Important Job Facts
93	Unit 5:	Summary for Job Hunters
	Module B:	HOW TO APPLY FOR THAT JOB
	Unit 1:	
	Unit 2:	*Under development –*
	Unit 3:	*Included in* Module A
	Unit 4:	
	Module C:	HOW TO GET THE MOST FROM MY JOB
	Unit 1:	My Responsibilities to the Job
	Unit 2:	My Boss's Responsibilities to Me
	Unit 3:	Getting Ahead on the Job
38	Unit 4:	Laws Protecting Workers

IV CONTENT CENTER: ME AND MY COMMUNITY

	Module A:	ME AND THE PEOPLE
28	Unit 1:	Of The People, By The People, For The People
37	Unit 2:	The Declaration of Independence
41	Unit 3:	Our Constitution and What it Means
36	Unit 4:	How We Organize to do Business in America
	Module B:	MY GOVERNMENT, HOW IT WORKS
168	Unit 1:	In My Community
69	Unit 2:	In My State
97	Unit 3:	In My Country
68	Unit 4:	In the World
	Module C:	CITIZENSHIP IS TAKING PART IN DECISIONS
124	Unit 1:	My [illegible]ts as a Citizen
122	Unit 2:	My responsibilities as a Citizen
56	Unit 3:	Being an Informed Citizen
86	Unit 4:	Population! Pollution! Conservation!
	Module D:	WHERE TO GO, WHO TO SEE, WHAT TO DO
141	Unit 1:	Welfare and Employment Services
141	Unit 2:	Medical and Health Services
141	Unit 3:	Legal Aid Services
141	Unit 4:	Leisure and Recreational Services

We obviously are impressed with the materials. Furthermore, more of our ratings would be in the excellent column if we had judged only those materials written by RFD.

Following are some specific points about the materials developed by RFD.

1. The materials did deal with essential coping skills.
2. The ideas were presented in interesting fashion for ease of reading.
3. There was excellent use of pictures, charts, and graphs.
4. There were many good and specific suggestions of "do's and don'ts".
5. The materials were focused on one important concept at a time.
6. The approach was appropriately geared to appeal to adults, e.g. (a) pictures were of adults - not children, (b) starting units with concrete suggestions rather than abstract principles.
7. The pictures were of people of varied age and background.
8. Pronunciation helps might have been useful, e.g. lasagna.
9. A few of the suggestions might be inappropriate, e.g. getting Julia Child's Cookbook at the library.
10. Pamphlet on master mix instructions was not included in Module B. How was it received?
11. Are the table setting illustrations appropriate to the experiences of the target audience?
12. We were especially impressed with Modules B,C, and D of "About My Home". These were among the first modules completed which might lead to some inferences about quality in relation to time.

The following are reactions to the selected materials.

1. The reading level was generally more difficult and often the print was more difficult than the RFD materials.
2. There was some duplication of content e.g. Module B in "About Me" and Module D in "About My Home"
3. The poor reader would need help with many of the words and the math examples.
4. The selected materials were just not as appropriate as the RFD materials. They were a compromise.

Demonstration

As indicated above, all but 10 units were ready when the demonstration started. The intent was that the home study materials were to be available to anybody upon request. The potential participant was made aware of the materials in various ways. The

main avenues of awareness were the TV program and, for the treatment group, the home visitor. Other means were the Almanac, action line, and personal contact. The participant was sent an order form that was very similar in form to the content center listings sheet. They were to order those units or modules that they wanted.

The response was quick and much greater than anticipated. Several people ordered everything. These requests were not honored. Rather a contact was made with the person to determine a single unit or module that was of most interest, and that was sent. Of course this person was encouraged to submit new orders for single items when ready.

The large response caused problems. First, the supply of materials was exhausted quickly in some of the centers. Consequently, there was a lengthy delay in filling some orders. This situation was especially unfortunate as it affected the experiment. Some of the participants in the experiment experienced the delays. We feel the project should have set aside a complete set of content centers for each person in the experimental and control groups so that the experiment would not have been confounded by differential non-availability of materials.

A second problem stemming from the response was that the home study teacher did not function as intended. Our interpretation of the intended role of this person was one of diagnosis and reaction. She was to work with the home visitor or directly with the participant in identifying educational experiences that might be appropriate for the participant. For example, she would identify materials in the support tracks, computation and communication skills, that might be useful for the person to study in order to benefit maximally from the materials in the content centers. She was not able to do this. Her time was taken in simply trying to satisfy the volume of requests for materials.

Our main criticism of the home study component is that it did not operationalize the conceptual model. Coping skill materials did get into the homes, but there is little evidence that much of the material in the literacy skills tracks did. This was partly due to the problem cited above, but also due, we think, to the use of such a "soft-sell" approach to literacy skills as not to sell them at all. We think, for example, that a literacy skill content center might have been included on the order form. Also the home visitors might have had more training than they did on identifying educational problems of participants and suggesting literacy materials for study when appropriate.

We are also critical of the lack of clientele analysis of who ordered the home study materials. We do know that the treatment group ordered significantly more materials than the control group

or general population. We also know that a greater proportion of the control group ordered materials than the general population and that the quantity is also greater. Needed data are those that describe the characteristics of the orderers in the general population. Were members of the target audience ordering the materials or were the orderers from the middle-class? This information is not available. Examination of the figures on orderers on the content center listings suggests the possibility that the greatest appeal was to middle-class women who like to get new recipes and cooking hints.

Since the demonstration, the project has worked on revising and completing the content centers. Several of the modules are being prepared in the third year for a publisher. The publisher will market the materials as part of a new Adult Basic Education package. The judgment of the publisher is another bit of evidence of the good quality of the materials.

This arrangement seems rather unique. We have questioned the appropriateness of a funded project preparing materials for a commercial publisher. On the other hand, materials are disseminated well if there is a marketing and distribution organization, and commercial publishers have such organizations. With an appropriate contract, the commercial publishing route is probably the efficient and effective way to get new materials disseminated.

In summary, the home study materials component was well-conceived. There was a tremendous work-load demand in this area, and the demand was rather well met. The materials that were developed were of high quality and very appropriate for the target audience. The component was not able to fulfill its expectations as well as intended, but the staff did learn many things about content and operationalizing the concept. Studying the experience of RFD should be useful for others contemplating a similar model.

Home Visit Component

In terms of cost-per-unit, the home visitor component was the most expensive aspect of Project RFD. Appropriately, it was also the component that was studied most intensively in the evaluation.

Specification of the home visit component in terms of numbers and function was vague in the first proposal. This came into focus during the planning year. It soon became apparent that there were rather strict constraints on the number of home visits. A decision was made to restrict the number of participants who would receive home visits to a manageable size. The evaluation personnel were consulted, and considering time, money, and data needs, a figure of 50 was determined. The evaluation design was then developed to permit a sample of 50 to be drawn from a larger population. These would receive the home visits. Another sample of 50 was drawn from the population and assigned to a control group of persons who had access to all of Project RFD, but the home visits.

Decisions about the function of the home visitor were also made during the first year and early part of the second year. The idea that the home visitor be an instructor was rejected on the basis of the problem of recruiting persons with appropriate training and background to the position. It was felt that the home visitor must be able to relate readily to the participant. Only after rapport was established could progress be made in the educative area. Accordingly the primary functions of the home visitor were deemed to be as adviser, confidante, and friend. This decision was studied intensively by the staff, and we feel the decision was justified.

The home visitors were selected and trained during the first part of the second year. The selection criteria were quite vague. The home visitors were expected to be from an environment where they would have experienced intimate contact with people like those in the target audience. They were also expected to be articulate, tolerant, and people-oriented. Those hired seemed to meet the criteria. It is important to note that all persisted through the project. Eight home visitors were selected and each had a load of 6 or 7 participants. The home visitors were employed on a half-time basis.

Three supervisors of home visitors were also employed. The supervisors were essentially resource people for the home visitors. They served as facilitators as well as trainers and helpers. The supervisors also administered tests and conducted the follow-up interviews. They were employed full-time.

There is no clear evidence of the numerical adequacy of the home visit staff. Intuitively we have a feeling that one supervisor per five to ten home visitors would be sufficient and that one half-time home

visitor could work effectively with 10 participants on a weekly basis. Some of the home visitors expressed a feeling to us that they could have worked with more people.

The training of the home visitors was very much based on participation and problem solving. A three day session was held in which the role was discussed and potential problems identified. Study materials were available for the problems and discussions were held. After this session, the home visitors were sent into the communities to learn about the community and its resources and to identify potential participants. The home visitor was to visit with people in power, in agencies, and with potential participants. This experience was expected to provide the home visitor with skills in relating to various people and with knowledge of the resources. In the process, the home visitors identified a population of 300 people in the four counties. This population was the group from which the two samples of 50 were drawn.

The home visitors and supervisors met regularly during this time and also during the demonstration to discuss their work. These sessions also provided training.

The home visitors were rather critical of the training. They expressed a feeling that they were not comfortable with their role or their knowledge of RFD. They did not feel ready for their work in the community. Perhaps part of the problem is that the home visitors may have had an expectation that they would be in a teaching role. After all, this was an education project. It is also likely that the role definition was ambiguous because the project was working with a relatively new concept and could not provide a clear definition. Although there was discomfort, the home visitors did function in the demonstration seemingly as intended and all persisted. Furthermore, two were hired in one county by a vocational school to function pretty much as they did in the demonstration.

In the demonstration, the home visitors were assigned to 6 or 7 participants. They were expected to visit with them on a weekly basis. Some were not able to get with the participant this often, however. They were to function as a friend and provide support, advice, help, and encouragement as needed. As might have been expected, it took some time before the home visitor was accepted in this role, in some cases nearly all 20 weeks. Consequently, the home visit was not well-integrated with the other components. We feel the project was over-optimistic about the immediate effect of the home visitor. Either the participants should have been selected on the basis of readiness for an educational experience, or the home visitors should have had some lead time to establish rapport before the other components were introduced. We believe that this factor was very important in the project's not having a demonstrated effect.

The training of the home visitors might also be criticized in its de-emphasis on the instructional role. The home visitor might have been better prepared to make decisions and suggestions about what materials the participant could study with benefit. Also, the visitor might have been trained in helping the participant use the materials not only for the information but also as a means of improving literacy skills. We imagine that the need for this kind of training would have become more evident if the demonstration had extended over a longer period of time than it did.

The home visitors were sometimes in an uncomfortable position of being apologizers for the project. They often encountered situations where a promised TV repair did not occur, ordered materials were not received, or other promised action did not materialize. Furthermore, the visitors learned to distrust the project somewhat. For example, they thought they were hired for 10 months but were terminated after 9 months, and the travel expense provision was changed during the project. In general, we doubt that the home visitors identified very closely with the project. It almost seems that they became adversaries in some respects, which, if so, likely had adverse effects on the project.

The problems that were encountered with the home visit component were understandable. We have little knowledge base for such activities, and the experience of RFD has contributed to the knowledge base. Despite the problems, the home visitors did function effectively. They were able to work with the participants and build a meaningful supportive relationship. They were also effective in that the participants with whom they worked were involved in many kinds of educational activities that they likely would not have had without the home visits and the rest of RFD.

Other Components

(Action Line, Almanac, Radio)

These three components were not part of the original conceptualization, and only the Action Line component was described in the second year report. A brief discussion of each component is presented below.

Radio

Very little information is available on the radio programs. Apparently these were developed as short spots (3 to 5 minutes) and were to serve a motivational purpose. Relatively little money or time was devoted to this component.

There is little basis for judging the adequacy of this work. Radio does have some unique possibilities that have already been demonstrated in things like correspondence study. We would suggest that the use of radio in the model be expanded and studied. It may well be that radio could be used effectively for motivational purposes at a much lower cost than TV.

Almanac

The RFD Almanac was a four page newspaper. Six issues were printed and distributed to the participants at regular intervals during the demonstration. Its content was closely tied to the TV programs. Tips, recipes, descriptions and "advertisements" about RFD materials were included. Its format was quite attractive, and it was very readable. The vocabulary level, however, seemed to be somewhat higher than one would expect from the target audience.

The rationale for the almanac has not been recorded. From our interviews with the staff and our examination of the paper, we have decided that the almanac was used as a way of maintaining a contact between the project and the participant. It seemed to be designed to stimulate interest in RFD and to provide information. Reactions to the almanac were quite favorable.

The RFD Almanac was a very interesting idea. It was relatively inexpensive, and our impressions from reading it were that it probably served useful purposes as a stimulator, in maintaining interest, and in providing information. The contribution of something like an almanac to the success of a home-based model merits further study.

Action Line

The action line component was designed to provide the learner audience with a direct communicative link with RFD. Before action line was conceived, the links were via the mails or, for a few, the

home visitor. The personalized nature of the telephone communication along with the promise of immediate action gave action line a unique and important contribution in the project.

We were impressed with the careful planning that was used in developing and implementing action line. Anybody considering such an activity would benefit from reading the description of this component in the second-year report of the project.

Action Line was used. There were some 1600 calls over the line in the five months. Furthermore, the satisfaction of the callers with the action or information received was high.

Action Line was relatively inexpensive because it was staffed by 50 volunteers from a church organization. The use of volunteers for such an activity is a good approach. We do feel some concern about the generalizability of this procedure to other communities, and with the question of how long the activity could be maintained with volunteer help.

In our judgment the Action Line component made a definite and unique contribution to the project. It is a technique or medium that would appear to have many possibilities in delivering information and stimulating participation.

Design and Evaluation

The RFD Project was fortunate to have the Psychometric Laboratory of the University of Wisconsin School of Education, involved with the internal evaluation. The Psychometric Laboratory made available a number of qualified individuals for assistance in the internal evaluation of RFD.

The internal evaluation had three distinct aspects: a) the TV component, b) the TV and the content material component, and c) the home visit component. Each aspect was evaluated in different ways and, in order to reduce complexity, this report will consider each evaluation aspect separately.

The TV Component

Evaluation of the TV component dealt initially with the problem of trying to obtain information about the impact of specific TV tapes on the target population. The original plan was to submit new tapes to groups similar to the target population and ask for a detailed critique. Those participating were to be subdivided into a viewing group and a control or non-viewing group and an achievement test was to have been given to both groups at the termination of the viewing for the experimental group. Failure to find sufficient participants forced a modification of this procedure. Ultimately, all participants viewed the TV tapes and were asked to indicate what they liked or did not like and what was helpful and appropriate. Since the TV tapes were still in production, future tapes could reflect consensus views arising from such discussions. Generally, the evaluation of the tapes was reported as favorable and the procedure was no doubt rich in suggestions for writers and producers. One wishes, however, that the original plan could have been inaugurated since it might have afforded an early indication of the difficulty of materially affecting the achievement of ABE individuals unless the educational experience, in addition to being captivating, has focus and direction.

A second concern with respect to the TV component centered around the actual population viewing the RFD programs -- Who were they and approximately how many were there? Various telephone procedures, some of them quite extensive in nature, were employed during this evaluation. There is data that the viewing audience for the RFD audience was high -- possibly as high as 24 percent for rural viewers and 28 percent for urban viewers. It is also apparent that the programs attracted a much higher percentage of women (80%) than men(20%) and this is reflected throughout the RFD program in numerous ways. For example, all of the home study visitors were women.

The TV and the Content Material Component

Again, the ABE-type participants were asked to respond to various of the content materials as they were prepared. These surveys were limited in nature and involved no comparison materials. It does, however, seem reasonable to conclude, on the basis of what was reported, that the content materials were generally judged to be relevant, readable and clear by subjects sharing many of the concerns and experiences of the target population.

The Home Visit Component

Since one of the most costly features of the RFD program relates to the home visit component, it is appropriate that most of the formal internal evaluation was directed to this component. The Psychometric Laboratory proposed a two-group design involving 100 subjects as a test of the effectiveness of the home visit component. In an early position paper it was forcefully argued against the adoption of a pre- and posttest format. Instead, it was decided to select 100 subjects all of whom met certain adult basic education criteria and then randomly to assign 50 subjects each to an experimental and a control group. The experimental subjects were to receive the home visitor while the control subjects were not. Obviously, control subjects had access to all other RFD components -- TV programs, content materials, hot line, etc. Ultimately, 71 females and 29 males were randomly (except for some geographic constraints) assigned to the experimental and control groups. Although it was not apparently intended to be this way, through some inadvertence the randomization actually resulted in a "separation" of some six family members into the two diverse groups. This seems to have been a poor procedure in that it affords the possibility for results which are not measurable. If one has expressed a desire to have the home visitor and only his wife (or husband) receives one, what will be his long-term response? Will he despair and become indifferent? Will he work harder on the content materials which come into the home? Will the selected subject "protect" the one not selected by less than a maximum effort? There seems to be no way for assessing such outcomes.

At the end of 20 weeks there was an extensive evaluation involving a comprehensive test which was prepared by the University of Wisconsin Psychometric Laboratory. Before this battery is considered, it is important to indicate the presence of another unfortunate problem in the administration of this test. It relates to an initial promise to the participants that no formal evaluation would be given. Many subjects were apparently upset by this sudden request which actually came sometime after the home visits had terminated. In addition, the home visitors, who were called out to administer the test, were most unhappy about their particular role

in this and this unhappiness was intensified in that their tenure with RFD had terminated one month before they had expected that it would. One cannot, of course, assert that these factors influenced the test results. Indeed, it seems unlikely that any influence of this sort would have exerted a systematic effect. And yet, it was not the most advantageous circumstance in which to evaluate the home study component.

Each of the available subjects (46 experimentals and 46 controls) were given a battery of six tests which was prepared by the Psychometric Laboratory. Three of the measures were: 1) communication skills, 2) computational skills, and 3) coping skills. All three tests were ingenious, readable, and interesting but they did demand one hour and thirty minutes for completion. Although there was no formal validation procedure for these tests they had high reliability and there is no reason, particularly in view of the competence of the people of the Psychometric Laboratory, to question the quality of the instruments. Three additional subtests dealt with: 1) the locus of perceived "control" (internal versus external) that a subject experienced, 2) an attitude measure toward education, and 3) a "behaviors" test entitled, "The World About Me". All three of these latter scales required an additional thirty minutes to complete.

The results of these six tests indicate no significant differences between the experimental and control groups. In fact, if one invoked a one-tailed comparison (which seems appropriate in that a priori predictions were implicit in the entire test procedure), there is only one test, "The World About Me", which approaches (.08) the arbitrary .05 level. Even in the most promising result the mean difference between groups was only 2.45 (41.54 against 39.09) and one can only question what such a difference means in practical terms, quite apart from any statistical considerations.

A follow-up interview was conducted with members of the experimental and control group some six months after the demonstration. The purpose of the interview was to determine if there were long-term effects of the project. The interviews were conducted by the home-visitor supervisors. No differences were observed between the groups on the questions. These interviews were resisted by several participants. They did not expect them, and they were suspicious of the purpose. This project certainly demonstrated the importance of the problem of sensitivity of the undereducated adult to data-gathering procedures.

The objective results of the home study component are most discouraging. On the other hand, it is important to consider that the time frame of the program was unusually short. This is particularly the case if one considers the initial problems the home visitors had in gaining the confidence of the experimental subjects. They began their contacts as friends and only gradually did they shift the nature of the visits to work sessions involving various

content materials. In many cases there simply wasn't enough time to get the study program going effectively. The external evaluation team was able to observe considerable progress with some subjects in one county where two home study visitors were retained by the County and continued to work with some of their subjects long after RFD was terminated. It is quite possible that a twenty week period is necessary just to ensure that the home study visitor can be effective in a more explicit educational program.

It should also be pointed out that the skills tested in the Wisconsin Test of Adult Basic Education (WITABE) were general in nature. Even had the home study component been more focused on adult basic education, it is difficult to see how life-long patterns of dealing with reality could have been materially altered in so short a period. Another way of discussing the WITABE is to say that it was most certainly an instrument which afforded little opportunity for manipulation by direct "coaching" of participants. All of this reflects credit to the RFD staff and to the internal evaluation team who insisted that their program be given an honest appraisal.

One of the project's consultants, Professor Robert D. Boyd, made an important point in the RFD Newsletter (August 1971) when he said that RFD might not significantly affect basic reading ability or other narrow educational objectives but might still prove to be a powerful program if it resulted in differences in self-esteem and community involvement. Unfortunately, the objective evidence does not support a contention that such changes took place. But once again the brevity of the program has to be a consideration. There is evidence secured by the external evaluation team that experimental participants requested, on their own initiative, significantly more content materials than did control subjects or a group of subjects who were randomly selected from those who had made at least one request. This seems to be the kind of behavior Professor Boyd had in mind and this particular result should not be dismissed as trivial. It is unfortunate that some unobtrusive measures of actual behavior could not have been secured on experimental and control subjects -- such things as their frequency of use of the Public Library, their understanding and use of community agencies, etc. The procedures used in selecting experimental and control subjects could in itself have served to sensitize control subjects with respect to educational attitudes and have militated against differences in some of the measures. At this point it would have been advantageous, although admittedly costly and difficult, to have secured test results from a second control group consisting of subjects meeting the adult basic education criteria and requesting at least some RFD materials.

One other point should be made from the finding regarding participation. The results reinforce research that indicates that an overt commitment to doing something is related to participation and persistence.

One final evaluation of the home visit component was an extensive "debriefing" of the home visitors by the staff of the Psychometric Laboratory. This report, which parallels many of the things the external evaluation team encountered in their talks with available home visitors, points to perceived inadequacies in the initial training of the home visitors. There were other complaints which grew out of the role ambiguity home visitors felt as "teachers" but, more basically, as friends of the participants. Problems or difficulties of the home visitors resulted from faulty communication (e.g., the previously discussed mixup with respect to whether or not subjects would ultimately be evaluated) and a failure of the RFD staff to act promptly on some of their initial commitments.

The following are offered as specific points of critique of the design and its execution.

1. The design was appropriate for determining the effects of the home-visit component. A problem with the design, however, is that it provides little opportunity to assess the effects of the TV and content materials. Some sort of indicator of change would have been useful.

2. The evaluation work was kept separated from the operation to maintain objectivity. A problem with this procedure, however, is that the evaluators were not cognizant of some of the changes of emphasis, e.g. reduced emphasis on literacy skills.

3. Many data were gathered and analyzed. It would have been desirable if there had been more data on characteristics of those who ordered content materials and the users of action line.

4. The operation of the demonstration was faulty in that some homes did not have working TV sets, some participants were in a marginal viewing location for the station, and the content center materials were either not done or in inadequate supply so that the participants failed to get what was ordered or experienced a long delay.

It is easier to criticize than create. Generally we were favorably impressed with the design and execution of the demonstration and evaluation. We do feel it important, however, to point out some of the possible reasons for the lack of impressive results.

Dissemination

Project RFD was very effective in its publicity and dissemination activities. We have heard comments like "RFD sure tells its story", "They really tell what they are doing", etc. from people all over the nation. The fact that the project director had a background in publicity work was a factor in determining the amount and kind of publicity and dissemination used. We were impressed with this work. The quality was good and the techniques were quite sophisticated. Educational developers would benefit from studying and using the dissemination techniques of RFD.

Of course there was some criticism of the dissemination activities. Some said that the project "tooted its own horn" and "I get tired of hearing about RFD". Some of these comments were probably justified, in other cases there seemed to be an element of professional jealousy in the remarks. Certainly there is a line where publicity has overkill possibility. Most educational activities are nowhere near this line. Our impression is that RFD did publicize itself more than most educational programs. The publicity was in good taste and honest, and we feel the educational community would benefit if most projects told their story as well as RFD has. The following material discusses the internal and external dissemination efforts separately.

Internal

Several techniques were used to publicize the project to the potential participant as well as other persons in the area who might be interested or affected. Among the techniques were the following:

1. Several meetings were held with agency people in the counties, i.e. welfare, extension, adult education, etc., to explain the purposes and procedures of the project. These meetings helped to forestall conflict when the demonstration was done, and also enlisted cooperation from the agencies.

2. Booths for the RFD Project were set-up at county fairs. These booths made persons aware of the project, and also solicited a large number of names of people as potential participants.

3. Shortly before the demonstration was started, the project took advertisements in papers, radio, and TV. It seemed this advertising paid-off in that there was a relatively large immediate audience for the TV programs and a large volume of requests for materials.

4. The almanac, critiqued elsewhere in this report, was also used to disseminate information about the project to participants.

5. Members of the project staff spoke to several groups, like service clubs, about the purposes and procedures of the project.

6. Surveys were made of adult interests and TV viewing habits, and meetings were arranged for feedback about the TV tapes and the materials. Dissemination was an important by-product of these activities.

The RFD Project regarded their program as a product to be marketed, and they did an effective job of marketing. The effectiveness is demonstrated by a high participation rate by the adults in the four county area.

External

The project also did many things to disseminate information about the project to audiences around the country. Among these were the following:

1. A newsletter was published monthly and distributed widely. The newsletter was attractive, well-edited, and informative. It was also honest in that it informed people about what had happened and of the problems.

2. The project staff made presentations at professional meetings and served as consultants to various projects. Some of the staff are now consulting with the Adult Learning Program Series (ALPS) project. The impact of these activities is demonstrated by many letters in the files from persons all over the nation in which high interest is expressed in RFD. The experience and knowledge of the staff of RFD are also permitting the contribution of many ideas to the ALPS project.

3. The project staff solicited for expansion of the project to the Central States region. The intent was to develop a network in the several states and provide RFD to the undereducated adults in a large region. The proposal was not supported by the ABE personnel in those states. Thus, this effort at dissemination failed.

   The project staff also attempted to interest the university and various state agencies in Wisconsin in carrying on with the work. Some interest was expressed, but nobody did make a commitment. The stated reason was that budget cutbacks prevented the university or the state agencies from adding an activity.

   These are important events that have to be regarded as negative outcomes. The budget cuts were a factor, but it is also possible that the people were not convinced that RFD had

demonstrated a sufficient level of effectiveness to justify its becoming operational on a broad base. We tend to feel the decisions were justified. However, this statement should not be interpreted that we feel RFD is a failure. Rather we feel that the model has promise, but that it can be improved and should be before it is considered ready in an operational sense.

4. The third year of the project is essentially a dissemination year. Project staff members are still presenting to professional groups and consulting. There are two other kinds of dissemination activities this year. First, the project has arranged for and is making formal presentations about the project in the ten USOE regions. Interested people from the region are invited to attend these two-day meetings and receive the story of RFD. About 300 persons attended these meetings. We attended one of the meetings. The presentation was interesting and honest.

   There is one concern we have about these meetings and the third-year work generally. Evaluative information should be available for the dissemination presentations. Unfortunately much of the evaluative information was not available until the middle of the third year and some were only available by the tenth month. We would criticize the project in its not pushing harder to get the evaluative information and analyses done quickly so that these kinds of information would have been available for most of the dissemination year.

   The second activity of the third year is to revise old and also write new content materials for publication. A publishing house has contracted to publish and market much of the content material of RFD. This should lead to widespread dissemination of these materials.

The third year of the project is viewed with mixed emotions by the evaluation team. Essentially there are three activities: dissemination to regions and other meetings, proposal writing, and the preparation of materials for publication. We find it somewhat difficult to justify the level of funding that the project had for this year. On the other hand, we predict that this project will be well-disseminated in terms of information and products. It will not be lost as a dust-covered report on a shelf. Perhaps the kind of activity that was permitted in the third year is important for obtaining maximum benefit from a project. People will be stimulated by the ideas, they will benefit from the availability of the materials, and the field will benefit from the fact that the staff has had time to reflect and develop ideas for further study of the model. We raise the issue without being able to make the judgment.

Administration of Project RFD

Project RFD was administered in the Communications Department of the University of Wisconsin-Extension. The project was directly accountable to the General Manager of WHA-TV, the University television station. Several people on the University staff were interviewed. Generally, these people were quite familiar with the project and interested in its results. The general feeling seemed to be that the RFD model might be very useful for extension activities of the University. There was very little criticism of the project. One point of criticism, however, was that the project was identified as a TV project by its being administered under the TV station. There was some feeling expressed that the project should have had a closer relationship with the educational programs in the University. We see some justification to this criticism, if for no other reason than public relations. The image of the project for many was as a TV program producer rather than an education project. Should RFD continue in some form, it may be well to consider having it administered in a department like continuing education and contracting for services with the TV station. Our general impression of the administration of the project in the University is that it was able to operate well in and received reasonable support from the University.

The internal administration of the project was also sound. The project director seemed to be running things, but at the same time delegated responsibility in a real sense to the two associate directors. An associate director left after the first year which probably affected the continuity of the project. A replacement was hired immediately, however. The general turn-over of project staff was quite low especially for a project on "soft money".

The fiscal aspects of the project were well-controlled. Apparently the budgets were accurately determined so that the budgeted and actual expenditures were very consistent.

In our judgment the project's internal administration was good. The following points of criticism are offered as things which, in hindsight, might have improved the project in an administrative sense.

1. As indicated above, the image of the project might have been improved for some if there had been a co-director in adult education or if the project had been administered in an education department.

2. There was some criticism that the advisory council was treated in somewhat of a cavalier manner. At times the advisory council seemed to be a sounding board rather than a group who gave input into decisions. We would also offer the critique that the project should have solicited more involvement from the target audience.

It must be recognized, however, that at some point decisions must be made. The staff did make and accept responsibility for the decisions.

3. There seemed to be some lack of coordination among the various components. This is reflected by the lack of integration among the components. Also the fact that the demonstration experienced procedural problems, such as no TV in some homes and shortages or lack of home study materials, suggests some coordination difficulties. Some of the staff of the project indicated that they were not always sure of what they were doing. Some of this feeling is understandable in that the project was in a sense feeling its way. On the other hand, there is some evidence of a lack of coordination among the project administrative staff.

These points of criticism are possible problems that we perceived in the project administration. In the main, however, we feel the project was well administered.

Cost Analyses

Decision making and resource allocation in the private sector of the economy is guided, at least in a general sense, through market-established prices. By studying the conditions under which market prices are established, economists have been able to draw some tentative (and often very restrictive) conclusions about the efficient allocation of resources in the private sector. On the basis of that information, public policy is formulated for the purpose of achieving economic goals, one of which is economic efficiency.

The contribution of economics to the study of choice problems is a derivation from the central "scarcity" premise of economic problems. There are some (chiefly the radicals) who argue today that affluence--not scarcity--is not the central economic problem. Such persons are fond of eloquently written passages such as the following description of a "new order" penned by John Maynard Keynes some four decades ago.

> We shall honour those who can teach us how to pluck the hour and the day virtously and well, the delightful people the lilies of the field who toil not neither do they spin.[1]

There is much about this type of world that appeals to all of mankind, for who among us can condemn motherhood, the flag, and apple pie? Sadly enough, however, such a philosophy is a tenet of religious faith rather than a useful appraisal and contention about the real world today. A fuller reading of Lord Keynes reveals that even he recognized this harsh reality in the following admonition:

> But Beware! The time for all this is not yet. For at least another hundred years we must pretend to ourselves and to everyone that fair is foul and foul is fair; for foul is useful and fair is not.[2]

Like it or not economic scarcity and the efficiency diety are, indeed, our gods for a little longer still!

Increasing participation by all levels of government in the economic affairs of society raises difficult issues. While economists have developed an intricate theory of resource allocation for the private sector of the market economy very little progress has been made in improving our understanding of the process of allocating resources in the public sector where the price system plays a muted role at best. Roland N. McKean, Professor of Economics at the University of Virginia, develops the thesis that an "unseen hand" driven by power and bargaining guides resource allocation in the public sector. The author's cogent plea for greater attention to problems of choice and resource allocation are as applicable to the rapidly growing adult education industry as to other categories of government.

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[1] J.M. Keynes, Essays in Persuasion (New York: Harcourt, Brace and Janovich, 1932), pp. 360, 362.

[2] Ibid.

All of this is not to suggest that cost effectiveness analysis of behavior related human resources research such as project RFD is a simple task which answers all questions conclusively. Lest the reader forget, the following limitations must be kept uppermost in mind:

1. Economic analysis and the efficiency diety may ignore many of the nonmonetary considerations which motivate private behavior as well as social goals prompting investment in education. Treating people as "capital" to be produced may distort a useful and purposeful dimension of life, and in any event does not necessarily represent the multiple objectives which characterize educational investments.

2. Investment in education and particularly in adults is only one of many interdependent ends which increase economic welfare. Multicollinearity between independent variables such as motivation, customs, socio-economic status, and ability, precludes accurate identification of the precise contribution of education much less the marginal returns generated by education.

3. Selection of a "proper" discount rate or the "relevant" rate of return is ambiguous--a problem particularly acute where the social rate of discount is needed.

4. Quantification of social, indirect, and noneconomic values is almost impossible. Educational quality, poverty and slums, income redistribution, or an alteration in national defense posture due to greater emphasis on education.

5. Uncertainty prevails in terms of future benefits, costs, interest rates, and time periods in both the private and social context. The relative attractiveness of learning may change over time as technological conditions are altered. Disadvantaged Americans may invest less in education because of a higher time preference for money due in part to different perceptions of risk and uncertainty.

6. Unlike investments in physical capital, human capital expenditures represent consumption as well as investment outlays, again in an unknown magnitude.

7. Different forms of human capital investment provide for more or less mobility and liquidity. The depreciation characteristics of human resources also may be important to investment in education, yet these relations are seldom dealt with.

The following pages contain various economic analyses of Project RFD. The reader should keep the above limitations in mind while considering the results.

The first part presents an analysis of the budget, and some cost/benefit considerations are presented in the last part of this section.

Aggregate Budget Analysis

Project expenditures over the three-year contract period totaled $707,793. Of this amount $653,393 was directly charged to the RFD project and its operations, the remainder representing indirect University overhead charges.[3]

All budget data were compiled and cross classified by

(a) year;
(b) project media component (television, home visit activites, materials (largely printed), and "other"--primarily general project supervision;
(c) class of service expenditure (e.g., personnel, travel, communication costs, supplies, equipment, rental and fees, and evaluation charges);
(d) type of costs, where type (I) denotes basic R and D outlays associated with creation and conceptualization of the RFD format and delivery system; type (II) denotes all costs attributable to the development of materials and programs; and type (III) represents expenses incurred in the operation and actual delivery of all RFD components. Table I and Figure I summarize these expenditures by relevant category.

In terms of budget allocations by media, expenses associated with the development of materials and for the television operation accounted for over two-thirds of direct RFD expenditures ($256,000 and $172,000 respectively).[4] Approximately two-thirds of all costs for these two media are attributable to personnel ($179,000 for materials and $79,000 for television). Supplies ($39,000 for materials and $40,000 for television) and rental and fees ($25,000 for materials and $37,000 for television) account for much of the remaining expenditures. In examing budget outlays by class of service, personnel costs loom very large, amounting to $414,000 of the total direct costs of $653,000, while expenditures for supplies and rentals and fees represent a much smaller but still significant portion of the total amount of funds available. The data in Table 2 depict expenditures and percentage breakdowns, again excluding the general overhead rate of 8 percent of charges at the University of Wisconsin.

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[3] General overhead charges by the University of Wisconsin totaled $54,000. All such overhead charges were "allocated" to class of service, type of media, and type of expenditure in proportion to the percentage of the total budget allocable to each activity.

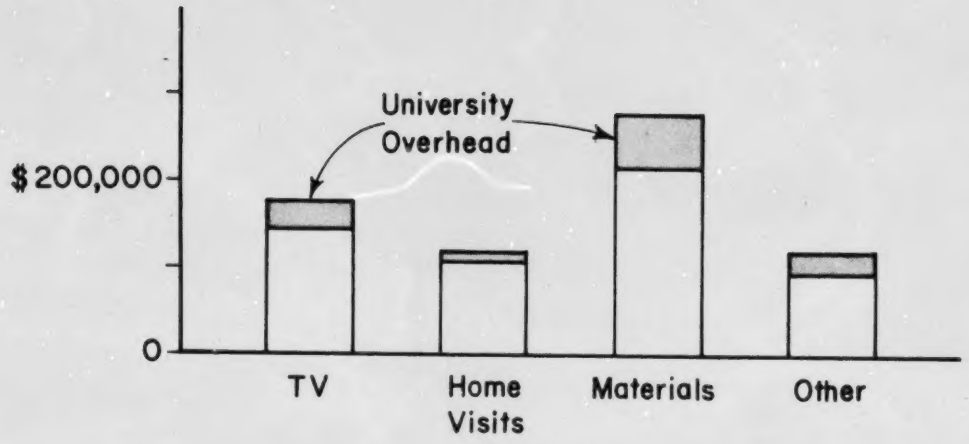
[4] All data exclude University overhead and are rounded in this summary.

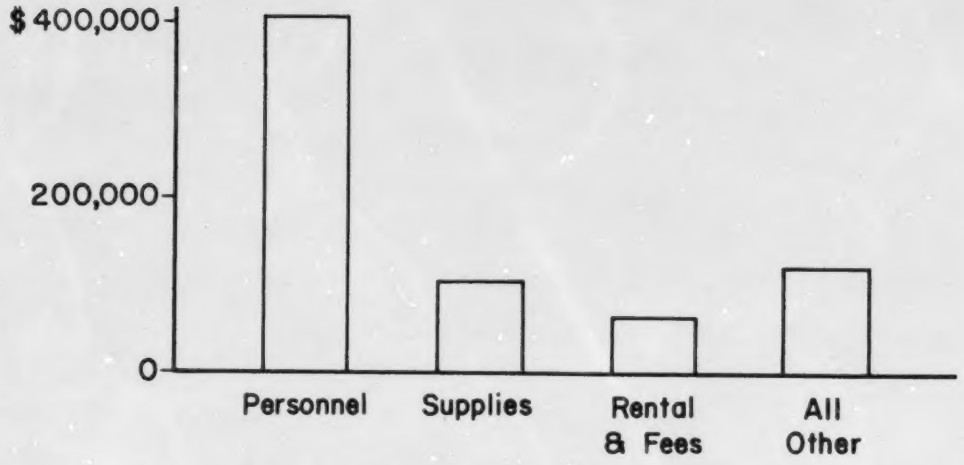
Table I

Budget Data

	Television	Home Visuals	Materials	Other	Sub Total	Overhead
Personnel						
1.	$ 23,324	$ 12,057	$ 37,647	$ 11,739=	$ 84,767	
2.	55,258	37,661	140,991	51,320=	285,230	
3.	458	43,089	791	-0- =	44,338	
	79,040	92,807	179,429	63,059	414,335	+34,490=$448,825
Travel						
1.	15	502	274	2,035=	2,826	
2.	3,156	972	1,999	8,704=	14,831	
3.	-0-	4,913	683	-0- =	5,596	
	3,171	6,387	2,956	10,739	23,253	+ 1,958= 25,211
Communications						
1.	-0-	-0-	-0-	606=	606	
2.	333	-0-	333	5,450=	6,116	
3.	2,893	1,154	-0-	-0-=	4,047	
	3,226	1,154	333	6,056	10,769	+ 898= 11,667
Supplies						
1.	3,071	27	285	127=	3,510	
2.	35,138	1,002	8,833	22,758=	67,731	
3.	1,747	566	29,882	-0- =	32,195	
	39,956	1,595	39,000	22,885	103,436	+ 8,595=112,031
Equipment						
1.	-0-	-0-	-0-	209=	209	
2.	981	-0-	-0-	7,608=	8,589	
3.	-0-	-0-	-0-	-0- =	-0-	
	981	-0-	-0-	7,817	8,798	+ 734= 9,532
Rent, Fees, Etc.						
1.	-0-	-0-	-0-	-0- =	-0-	
2.	11,864	275	222	2,752=	15,113	
3.	25,224	-0-	24,938	-0- =	50,162	
	37,088	275	25,160	2,752	65,275	+ 5,435= 70,710
Evaluation						
1.	1,290	1,290	1,290	-0- =	3,870	
2.	7,204	7,204	7,285	-0- =	21,693	
3.	520	924	520	-0- =	1,964	
	9,014	9,418	9,095	-0-	27,527	+ 2,290= 29,817
SUB TOTAL =	172,476	111,636	255,973	113,308	653,393	+54,400=707,793
University Overhead	14,362	9,302	21,325	9,411	54,400	
GRAND TOTAL	$ 186,838	$ 120,938	$ 277,298	$ 122,719	$707,793	

Category 1 is Cost and expenses associated with basic research and creation activities in the conceptualization of RFD delivery systems.
Category 2 is Cost and expenses (post conceptualization) of the development of materials and programs up to delivery phase.
Category 3 is Cost and expense incurred in the operation and actual delivery of RFD systems.


University
Overhead
$200,000
0
TV
Home
Visits
Materials
Other


$400,000
200,000
0
Personnel
Supplies
Rental
& Fees
All
Other

$400,000
200,000
0
R & D
Development
Delivery

Table 2

Summary of Various Cost Categories for RFD Project

	Project Media		Class of Service		Type of Costs	
	$(000)	%	$(000)	%	$(000)	%
Television	$172.5	26.4%				
Home Visits	111.6	17.1				
Materials	256.0	39.2				
Other	113.3	17.3				
Personnel			$414.3	63.5%		
Travel			23.3	3.5		
Communication			10.8	1.6		
Supplies			103.4	15.9		
Equipment			8.8	1.3		
Rent/Fees			65.3	9.9		
Evaluation			27.5	4.3		
I: R & D					$ 95.8	14.5%
II: Development					419.8	64.3
III: Delivery					138.3	21.2
	$653.4	100.0%	$653.4	100.0%	$653.4	100.0%

SOURCE: Table 1

Table 2 also includes data on the proportion of costs (exclusive of overhead) due to basic R & D (type 1), development (type 2) and delivery (type 3) activities. Among the potential uses for such information is that it can be useful in approximating the minimum scale of an operation at which a project breaks even in the sense that returns equal costs. That is, one can identify the minimum return and the project size best suited to an effort such as that undertaken by RFD.

Tables 3, 4, and 5 break down and summarize the budget for RFD by media and class of service expenditure. Not included in this comparison is a breakdown of the category "other" for it largely represents general project management costs and not a form of media. As noted earlier, personnel costs are a major share of total costs, particularly for the Home Visit program, while supplies and rentals and fees are also large for the television and materials media used.

Table 3

Television Budget

Personnel	$79.04[a]	45.8%
Travel	3.17	1.8
Communication	3.23	1.9
Supplies	39.96	23.2
Equipment	.98	.6
Rental and Fees	37.09	21.5
Evaluation	9.01	5.2=
SUBTOTAL	172.48	
University Overhead	14.36	
TOTAL	$186.84	100.0%

Table 4

Home Visits

Personnel	$92.80[a]	83.2%
Travel	6.39	5.7
Communication	1.15	1.1
Supplies	1.60	1.4
Equipment	0.00	0.0
Rental and Fees	.28	.2
Evaluation	9.42	8.4
SUBTOTAL	$111.64	
University Overhead	9.30	
TOTAL	$120.94	100.0%

Table 5

Materials

Personnel	$179.43[a]	70.1%
Travel	2.96	1.2
Communication	.33	.1
Supplies	39.00	15.2
Equipment	0.00	0.0
Rental and Fees	25.16	9.8
Evaluation	9.09	3.6
SUBTOTAL	$255.97	
University Overhead	21.33	
TOTAL	277.30	100.0%

a. In thousands of dollars

SOURCE: Table 1

Potential "Benefits" and Market Characteristics

Adult education efforts such as RFD can make vast socio-economic contributions to a variety of persons, particularly disadvantaged Americans with employment, income, and cultural problems. Typically, approximately 1 out of 8 Americans are officially (and conservatively) defined as members of the poverty population, and a like (or greater) population of Americans have 8 or fewer years of formal school. No more than one-third are 65 years or over and, as elsewhere, failure to meet adult education needs contributes to the hard-core of unemployed, underemployed, and poor citizens. The size of this adult market for RFD type programs varies geographically and by the definition used, yet it is clear that, out of a population of some 82,000 family units (the approximate size of RFD's market) with a sizable number concentrated in rural areas (some 24,000 families) and where income and employment problems are proportionally high, there is a clear need for project RFD.

Continuing education of this sort may be of particular importance since it offers a second chance for adults who once may have been adolescent dropouts and only later developed the motivation and maturity to acquire the training required in a modern society and economy. Considering coping problems as ranging across such diverse subjects as acquiring knowledge about consumer installment credit; providing home repair services; learning the basics of adequate nutritional and health needs; or managing personal finances and finding out about alternative job or occupational opportunities, it is rather easy to envision a family unit benefiting by several hundred dollars a year over their remaining lifetime. Further "spillover" benefits may also accrue to children, dependents, or other adults associated with an affected family unit, in which case substantial multiplier impacts may spin out of programs such as those of RFD. Finally, society itself will, in all probability, capture substantial benefits in a variety of ways including a more informed citizenry and electorate; better health and productivity; and possibly lower welfare burdens, juvenile delinquency or crime, and fewer educational and societal "dropouts."

Economic research efforts have, in spite of numerous benefit quantification problems, identified the desirability of a variety of public expenditure programs. Presuming that the cost-effectiveness equivalent of $400 per year in material improvements in coping behavior were forthcoming from an effort such as RFD over a 20-year lifetime, each 1 percent of all family units in the market for such a service would receive $4,600 in ascertainable benefits.

One way in which intangible and difficult-to-quantify benefits or "effectiveness" can be assessed and imputed is to vary certain data parameters about which uncertainty exists. Suppose that (a) benefits prevail in the $300 to $500 annual amounts as denoted in Table 6; (b) success ratios ranged from 1 out of 10 to 1 out of 30

families; (c) 3,000 families were exposed to an effort such as project RFD; (d) there were no social benefits nor any spillover or multiplier effects; and (e) the social discount rate is 6 percent over a 20-year lifetime (in reflection of the public sector's opportunity cost of capital). Cost-effectiveness relationships for annual outlays are shown in Table 6.

Table 6

Hypothetical Cost-Benefit Comparisons for RFD*

Annual Value of Benefits	Proportion of Persons Exposed and Materially Aided out of 3,000 Exposed Units		
	N = 1/10	N = 1/20	N = 1/30
$200			
Present Value	$690,000	$345,000	$235,000
Ratio B/C if C = $100,000 . .	6.9	3.5	2.4
Ratio B/C if C = $200,000 . .	3.5	1.8	1.2
$300			
Present Value	$1,035,000	517,500	345,000
Ratio B/C if C = $100,000 .	10.4	5.2	3.5
Ratio B/C if C = $200,000 .	5.2	2.6	1.8
$400			
Present Value	$1,380,000	690,000	460,000
Ratio B/C if C = $100,000 .	13.8	6.9	4.6
Ratio B/C if C = $200,000 .	6.9	3.5	2.3
$500			
Present Value	$1,725,000	862,500	575,000
Ratio B/C if C = $.00,000 .	17.3	8.6	5.8
Ratio B/C if C = $200,000 .	8.7	4.3	2.9

*The annuity value of 11.47 applies at 6 percent for 20 years (see page 52).

Under the stringent assumption that annual depreciable project costs equal $200,000, benefits are valued at $200 annually, and the success ratio is a mere 3.3 percent of the exposed population, the hypothetical RFD payoff would be $B/C = \frac{\$235,000}{\$200,000} = \$1.17$ for each $1 in costs. At the other extreme of $100,000 in annual costs, $500 in annual benefits, and a 10 percent success ratio, B/C = $17.25 for each $1 in outlay. The "true" level of effectiveness no doubt lies between such extremes, however, it must also be remembered that the above data comparisons assume that all expenditures are directly output-oriented. This, of course, is much too restrictive a presumption for RFD since some rather substantial proportion of the

$708,000 in expenditures was related to demonstration and experimental goals. Then, too, the above comparisons fail to disaggregate effective costs and values emanating from various RFD media directed at differentiated markets (e.g., target groups vs. other exposed populations).

Analysis of Impact

Table 6 and the discussion suggest that the benefit/cost ratio for a project like RFD is quite favorable if one can assume at least $200 worth of annual benefits. Unfortunately the evaluation data of the project do not support the assumption. On the other hand, there are likely many benefits or outcomes of the project that were never observed, but which were real and could easily add to $200 per year. Repairing something, improved buying procedures, saving on interest rates, saving a life; these and other things are benefits that reasonably might accrue to project participants.

An attempt was made to quantify the impact of the project using a probability modeling technique. The rationale for this technique is presented below.

A Framework for Probability Modeling.

Management scientists have developed and applied a vast assortment of analytical models to many areas of managerial control in the private sector in recent years. Some examples are inventory management, brand preference analysis, credit rating terms, forecasting and evaluating aggregate demand for a firm, financial planning and investment control systems, and risk analysis of collective bargaining and capital budgeting problems. The methodology and models used by private enterprise must be restructured to various degrees to fit the public sector management context. There are three fundamental features which characterize such decision problems.

1. Probabilities must be non-negative and also equal to one for all events which are certain to occur.
2. Any events which do not occur jointly are the sum of all probabilities for individual subevents.
3. The value of outputs (often in the form of incommensurable products or output) must be quantified--a difficult but nonetheless not impossible task. Millions of dollars in resources are made available for public sector expenditures in order that some given task with an alleged value might be performed. The very commitment of economic resources tacitly provides imputed shadow values.

There are rather significant differences between statistical probabilities and judgmental uncertainties. The former is best termed an objectivistic view of statistical decision making, whereas the latter is a subjectivistic interpretation of probability.

Many scholars with vast experience in management science and in other related disciplines concentrate only upon objective, statistical probability analysis--a comfortable, logical, and empiricaily "firm" view of the world. Unfortunately, the objectivistic view also crucial relationships as givens, including the interaction between objectivistic and subjectivistic data as well as the singular influence of the latter type of judgmental uncertainties. Objective probabilities do indeed represent the "best of all possible worlds" for the academic analyst, but as models or generalizations of reality they do not necessarily represent even "second best" solutions. Experiments cannot always (or even most of the time) be repeated independently over and over again under uniform conditions. As uncomfortable as it may be, the real world environment is uncertain and dynamic, and one often is forced to view objectivistic efforts as being more or less useless as predictive, explanatory,management decision models of the optimality variety.

Three of the evaluation team members and three of the project staff made several judgments of the impact of the project using a Bayesian methodology of the probability model. A complete description of the approach will be presented in a technical report under preparation. The results are presented in Tables 7, 8, 9, and 10. Table 7 contains the averages of the probability that a certain degree of improved coping behavior was attained in the target and total population. Table 8 shows the average probability that each proportion of persons in the target and total population was materially aided from RFD. Table 9 contains the average probability what improved coping skill would be worth to the participant. Table 10 shows the judged and desired weight given to six goals of the project, and the judged degree of success with the overall goal. It will be recognized that the overall goal was the first objective of the project. The six goals were rewordings based on the other nine objectives of the project. Figure 2 presents a comparison of the difference between the evaluation team and the project leaders in their judgment of the degree of success of attainment of the overall goal. The following material is based on these tables and the budget data.

Aggregate Cost-Effectiveness of RFD.

In what follows, we shall first summarize aggregate cost-effectiveness and the comment upon the three major media approaches.

Let us assume that:

1. Costs and returns are a linear and direct function of persons subjected to RFD efforts.

2. All costs of types I and II are fixed, having a straight-line depreciable life of five years, with a remaining salvage value of 10 percent of total fixed charges (10% x $570,000). The $570,000 figure includes type I and II costs plus all overhead costs.
3. FC = fixed charges less salvage value (= $57,000) (Cf = FC/Q is average fixed charge allocation where Q = the number of families).
4. VC = variable charges (Cv = VC/Q is average variable charge allocation).
5. Bv = effective present value of returns or $Q \cdot \bar{V}$, where $\bar{V}$ represents the average annual value of RFD to a participatory family.
6. IF = the interest factor. All monetary values are always in terms of present worth, discounted at the social rate of discount (assumed here to be 6 percent).[5]

Under these circumstances, fixed charges assignable yearly, excluding university overhead, approximate $102,000, whereas variable cost charges total $138,000. Assuming that the number of families benefiting from RFD equals the number in the target group (50 families), and that an equivalent annual benefit of $400 per year per family for 20 years is applicable, the data from Table 6 reveal that:

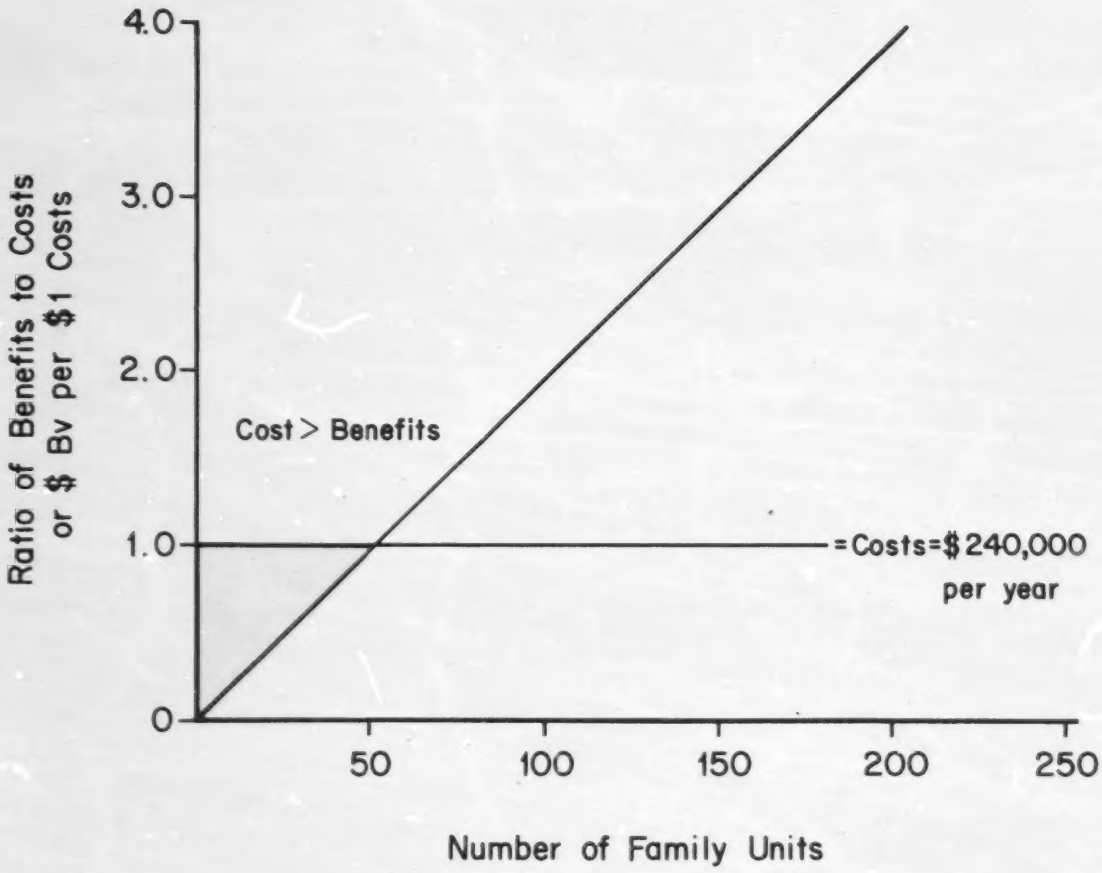
$$\frac{Bv}{C} = \frac{\$230,000}{\$102,000 + \$138,000} = .96$$

It is much more likely, however, that some number in excess of 1.6 percent of 3,000 exposed families benefited fully from RFD. As Figure 2 reveals, for each such 10 family units above the break-even level (Bv/C = 52 x 4,600,/$240,000 ≈ 1.0) of 52 family beneficiaries net benefits above annual costs rise by $46,000, or the ratio Bv/C increases by approximately .2 for each 10 unit increase in family beneficiaries (e.g., at 100 families; Bv/C = 1.9, at 150 families, Bv/C = 2.9; and at 200, Bv/C = 3.9).

---

[5]The present value of benefits, Bv, for a lump sum of $\$\bar{A}$ in the future is $\bar{A}$ x the reciprocal of the compound interest factor $(1 + i)^n$. The present value of a uniform annual series of $\$\bar{V}$ per year is Bv = $\$\bar{V}$ x IF, where

$$IF = \frac{(1 + i)^n - 1}{i(1 + i)^n} = 11.47 \text{ at } 6\% \text{ for } 20 \text{ years.}$$


4.0
3.0
2.0
1.0
0
Ratio of Benefits to Costs
or $ Bv per $1 Costs
Cost > Benefits
=Costs=$240,000
per year
50
100
150
200
250
Number of Family Units

Thus far, little has been said about the measurable effectiveness of RFD--and for good reason. First, this effort represents the classic case of intangible and incommensurable benefits; i.e., the assignment of economic value to achieving greater coping behavior is at best a very hazardous undertaking. The hypothetical "implied" valuation options discussed in the previous section suggest that efforts such as RFD probably are economic in nature, and perhaps substantially so. To sharpen our understanding of the cost-effectiveness of RFD, some consideration can be given to certain "subjectivistic" probability data gathered in an attempt to gauge project success.

Table 7 indicates, for the target population of 46 disadvantaged families and the other exposed population, the "most probable" levels of improvement in coping behavior might be in the order of 20-25 percent for the target group and 10-15 percent for the other exposed population. Unfortunately, subjectively determined probabilities such as these are not really confirmed by the evaluation data.

Table 7

RFD's Impact on Improved Coping Behavior

Degree of Coping Behavior Improvement At Least	Probability That Stated Level of Improvement Was Achieved	
	Target	Others
1/2%	.03 (.07)*	.28 (.18)*
3%	.15 (.13)	.10 (.12)
10%	.21 (.20)	.19 (.27)
20%	.19 (.12)	.15 (.20)
30%	.12 (.13)	.08 (.07)
40%	.08 (.11)	.06 (.05)
50%	.06 (.04)	.04 (.03)
70%	05 (.04)	.04 (.03)
80%	.04 (.05)	.04 (.05)
80%+	.07 (.03)	.05 (.00)

*Data estimate of the evaluation team only, whereas data not in ( ) represent the weighted average of key project leaders and the evaluation team members.

Table 8 depicts the best "quesstimates" of project leaders and the evaluation team concerning the proportion of persons materially aided. While again subject to numerous criticisms concerning data reliability, it is clear that those close to the project subjectively judge that something between 15-25 percent of the target group and 5-15 percent of the other exposed population received such benefits in some measure.

Table 8

Proportion of Exposed Population Benefiting From RFD

Proportion of Persons Exposed to RFD "Materially Aided"	Probability that Stated Percent of Exposed Population Were Materially Aided	
	Target	Others
5%	.17 (.30)*	.36 (.62)*
15%	.10 (.20)	.14 (.16)
25%	.13 (.18)	.14 (.14)
40%	.20 (.23)	.17 (.04)
60%	.20 (.03)	.10 (.04)
80%	.15 (.03)	.08 (.00)
80%+	.05 (.03)	.01 (.00)

*Data estimates of the evaluation team only, whereas data not in ( ) represent the weighted average of key project leaders and the evaluation team.

On the basis of such information and other subjective impressions as well as objective information, our rough conclusions are:

1. The marginal impact of the home visit program was such as to double the effectiveness of RFD (in terms of both improved coping behavior and proportion of population materially aided).
2. Of some 3,000 persons in the "other population" exposed to RFD, something upwards to the equivalent of 50 families (ranging to as many as 150 or more) benefited fully from RFD.

Table 9 represents an attempt to quantify, in annual dollar returns, the effective value of improved coping behavior. On a weighted average basis, per unit target group benefits appear to range from $350-$450 annually, whereas the subjective value placed upon the per unit value of improved coping behavior for the other exposed population approximates $300-$380.

Finally, Table 10 reveals the degree to which project team members and the evaluation team weighted the goals and overall performance of RFD. Goal I ("create a viable TV-based multi-media reusable program") and Goal II (involve a large number of undereducated adults ...) appear to have received most emphasis. In general terms, a significant disparity in the judgment of overall goal achievement of "demonstrating the effectiveness of the integrated program" exists, where the evaluation team tends to rate level of achievement at about 40 percent compared to something like a 70 percent rating on the part of project staff.

Table 9

Value Alternatives for Improving Coping Behavior

Appraised Subjectivistic $ Value of Improved Coping Skill	Probability of Stated $ Levels	
	Target	Other
$ 0 - 100	.17*	.12*
$101 - 200	.20	.25
$201 - 300	.12	.18
$301 - 500	.19	.19
$501 - 700	.10	.13
$701 - 900	.11	.11
$900+	.11	.02

*Data estimates of the evaluation team and the key project leaders.

Table 10

Overall Project Performance

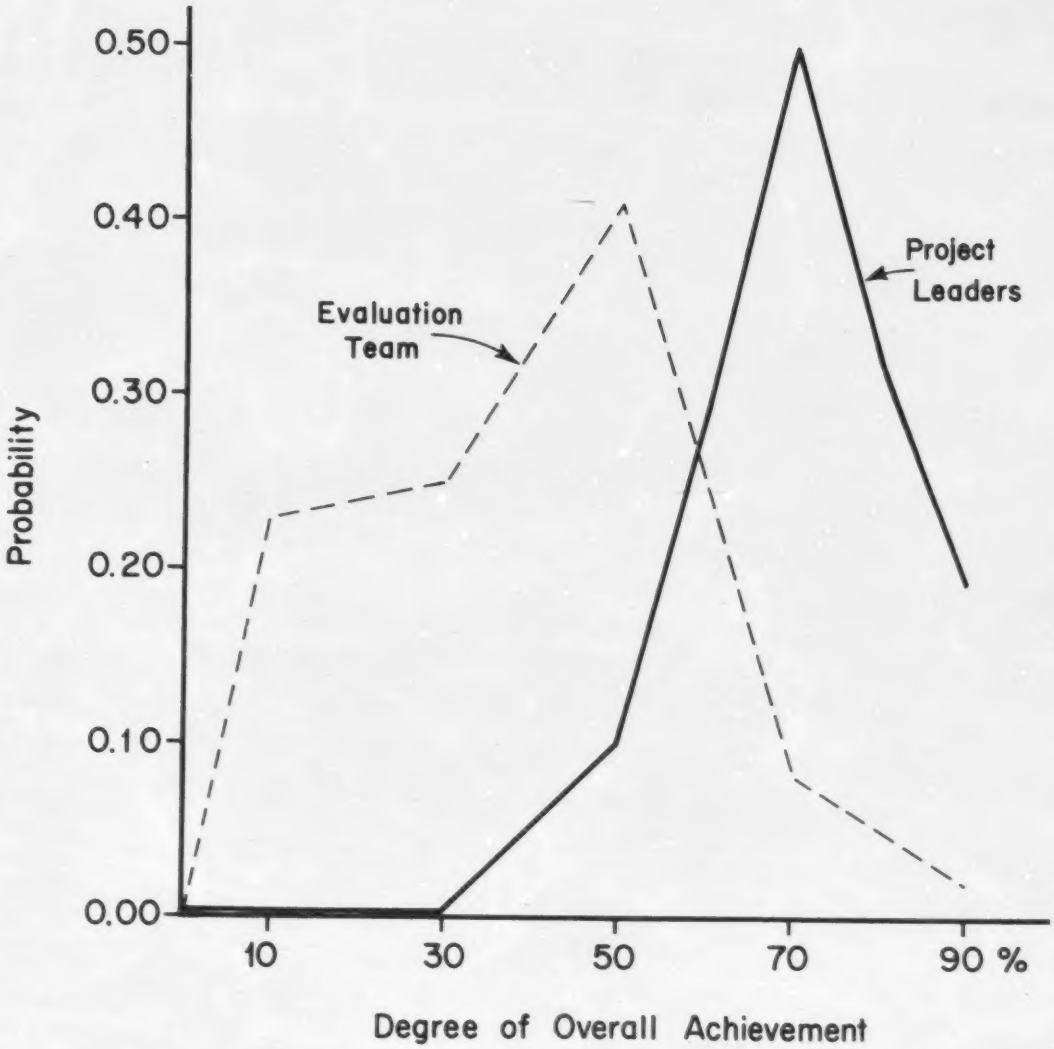
(a) Goal Importance

Six Alternative Goals	Evaluation Team Rank	Weight	Desired Weight	Project Leaders Rank	Weight
Goal I	1	.37	(.18)	1	.30
Goal II	2	.20	(.13)	2	.28
Goal III	4	.12	(.08)	5	.08
Goal IV	6	.08	(.10)	6	.07
Goal V	3	.13	(.13)	3	.17
Goal VI	5	.10	(.17)	4	.10

Goal I - Create a viable television based multi-media program usable in similar situations in other parts of the country.
Goal II - Involve large numbers of adults not now able or willing to participate in ABE programs.
Goal III - Assist in the development of skills that can lead to new careers for home study aides and other staff members.
Goal IV - Demonstrate involvement of disadvantaged individuals in the development and implementation of such a program.
Goal V - Develop participant skills in the basic fields of communication and computation while improving the capability of the target audience to exercise citizenship responsibilities.
Goal VI - Develop participant skills from present proficiency toward eighth and twelfth grade equivalency achievement levels.

(b) Overall Achievement

Degree of Success in Achieving Goal of "Demonstrating effectiveness of integrated television, home study, home contact, and visit program for rural ABE students.	Probability that Stated Level Was Achieved
10%	.11
30	.12
50	.24
70	.31
90	.22


0.50
0.40
0.30
0.20
0.10
0.00
Probability
Evaluation Team
Project Leaders
10
30
50
70
90 %
Degree of Overall Achievement

Some Comments on Individual Media Effectiveness

No evaluation of the home visit program can ignore the fact that it involved incremental costs of $112,000 (or more than $2,400 per 46 final participants), some $98,000--or $2,100 per unit-- of which represents variable expenditures. There is no way in which even break-even cost effectiveness can be obtained unless variable expenditures per unit can be covered. For the home visit program, potential Bv = $4,600, Cv = $2,100, FC = $13,800, and Q = 46.

For the home visit program to be minimally effective at the margin, it would require that the incremental gain in probable benefits (P) increase to .46. That is, as a result of the home visit program alone, it is necessary that the RFD project success ratio rise to almost 1 out of every 2 exposed persons.

$$P \cdot Bv \geq Cv$$

$$P \cdot 4{,}600 = \$2{,}100$$

$$P = .46$$

It does not appear reasonable to presume gains such as increased success ratios up to almost 1 out of 2 families were forthcoming at the margin from home visits; hence, it is difficult indeed to justify the home visit portion of Project RFD. However, since one cannot separate the "joint" product resultant from some combination of TV, Materials, and Home Visits, about all that can be said is that the burden of proof for Home Visits rests with that program and its rather high unit costs relative to a nominal quantity base.

It should be kept in mind the Home Visit component was judged to have had quite an effect on project impact with those it reached. Also the costs of this component might be reduced considerably by more efficient use of home visitors or by such things as volunteer home visitors.

Again considered separately, the cost-effectiveness of TV as a media may represent a more economic operation. Assuming some 20,000 families were exposed to and benefited from no less than one program, it would require only $1 per year per family in benefits spread over a 20-year benefit lifetime to achieve a benefit/cost ratio equal to 1.3.

$$\frac{Bv}{C \div Q} \quad \frac{\$11.47}{\$\ 8.60} = 1.3$$

Alternatively, if only 1 out of 10 exposed families acquired annual benefits equal to $20 per year and such families accure the average costs of 10 exposed family units, each $1 in costs would generate $2.67 in benefits.

$$\frac{Bv}{C \div 10Q} = \frac{\$229.00}{\$\ 86.00} = 2.67$$

A tempering aspect to this favorable ratio is that the assumption of a five year life for the materials is least tenable for television.

Similar conclusions apply to the material media, which include action line as well as a large variety of written materials. Assuming that simply 3,000 pieces of material were distributed at a total cost of $256,000 or an average cost of $85, break-even cost-effectiveness would require benefits of approximately $7.40 per year for each material recipient, or some $15.00 annually if only one-half of all recipients actually benefited (or if a minimum Bv/C = 2 was stipulated and all recipients benefited.

In summary, RFD appears to have been a reasonably cost-effective effort--in no small measure because (a) demand for such services is substantial and (b) a relatively large number of persons were exposed to RFD (excluding the Home Visit program). These conclusions depend, however, upon the quantitative magnitudes used, and while much about the data is admittedly difficult to pinpoint with accuracy and may even be ill-defined, RFD does appear to have been a worthy research and demonstration effort. This is not to say, however, that the greatest possible efficiences were achieved. Much about the Home Visit program was excessively costly relative to the potential benefits that could have been generated; the reusable output from TV as a media may be severely limited and if so, costs would have to be depreciated over less than 5 years; and the topical and qualitative features of much of the written materials could be improved upon.

Recommendations

Our study of this project has suggested several recommendations of varied specificity. Most of the recommendations are offered as points worthy of consideration by people working in this area.

1. The staff of the Project RFD should be encouraged and supported in continuing their work in this area. They have now developed an expertise that should not be lost from lack of use.

2. Television and home study materials seem to have favorable cost/effectiveness possibilities, but it is more difficult to justify home visitors on a cost/effectiveness basis.

3. We would recommend that an educational type project should be identified with and administered in a unit that has expertise in the content and audience rather than a materials production unit.

4. Obviously, all components of a project should be ready when needed. The experience of RFD points to the need for planning sufficient lead time to insure that all components are ready.

5. Educational programs should be planned <u>with</u> the target audience not <u>for</u> them.

6. Evaluation activities should be closely tied to the on-going administration of the project so that they are kept relevant. Furthermore, the evaluation should be planned so that it is largely done in time for use in the dissemination activities.

7. Testing and other kinds of data gathering with adults are problems. Unobtrusive measures should be used if possible. Where direct data gathering is to be done, the project should be straightforward and honest in its approach. It should not do things it said it wouldn't do.

8. Educational activities are products to be marketed, and sophisticated approaches to marketing them seem to be justified.

9. The integration of various educational media is easier said than done. Experimentation is still needed in this area, especially in difficult to control situations like home study.

10. When using a home visitor approach it would seem that two things might be considered to optimize effects.

    (a) Select for the treatment those who are quite aware of what is involved, and who have indicated an interest in being involved based on their awareness, or

    (b) Have a warm-up period in which the home visitor is able to establish the needed rapport before the rest of the treatment is started.

11. There is evidence to recommend that techniques like enrollment and stated commitment are conducive to participation and persistence by adults in educational programs.

List of Recommended Project Materials for In-Depth Information. Limited copies are available from the project. Items 1, 2, 3, and 6 will likely be in ERIC.

1. RFD - The First Year - Provides descriptions of the planning and the conceptualization of the project.

2. RFD - Rural Family Development - Second Year Report, June, 1971. A good description of the operation of the project. Several of the reports of the internal evaluators are included.

3. The RFD System - This report provides a good overview of each component. Cost estimates are included.

4. Newsletters - A complete set of the newsletters published monthly will provide a good overview of the project.

5. The Almanac - A copy of the almanac is useful reading in that it gives an idea of the content emphases of the project.

6. A third year report will be written. It will include additional reports of the internal evaluators.